



1279158 - R8 SDMS

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref: 8ENF-L

November 28, 2013

Sandra K. Allen
Assistant Attorney General
P.O. Box 140873
Salt Lake City, Utah

Heather B. Shilton
Assistant Attorney General
Natural Resources Division
1594 West North Temple, #300
Salt Lake City, UT 84116

Dana Jacobsen
Office of the Solicitor, Department of the Interior
755 Parfet, Suite 151
Lakewood, CO 80215

Casey S. Padgett
Branch of Environmental Compliance and Response
Office of the Solicitor, Department of the Interior
1849 C Street, N.W., Mail Stop 5530
Washington, D.C. 20240

Kevin R. Murray
Holland & Hart LLP
222 South Main Street, Suite 2200
Salt Lake City, UT 84101

RE: Richardson Flat Tailings Site, Park City, Utah
EE/CA for OU2 and OU3

Ladies and Gentlemen:

Enclosed are the signature ready copies of the Settlement Agreement and Administrative Order on Consent for EE/CA Investigation and Removal Action for operable unit 2 and 3 of the Richardson Flat Site. As soon as I receive the signature page for United Park City Mines, I will begin routing the package for review and approval by EPA management officials.

Thank you for your cooperation in this matter. Please call me at 303 312-6904 if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrea Madigan", with a long horizontal flourish extending to the right.

Andrea Madigan
CERCLA Supervisory Attorney

Enclosures



**U.S. EPA Region 8
CERCLA Docket No.**

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (Settlement Agreement) is entered into voluntarily by the Respondent, United Park City Mines Company (UPCM), and the U.S. Environmental Protection Agency (EPA), the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (FWS), the Utah Department of Environmental Quality (UDEQ), the Utah Division of Parks and Recreation (UDPR), and the State of Utah Natural Resource Trustee (hereinafter collectively the "Parties"). This Settlement Agreement provides for the preparation and performance of an Engineering Evaluation/Cost Analysis (EE/CA) and a non-time critical removal action (Removal Action) for operable unit 2 (OU2) and operable unit 3 (OU3) of the Richardson Flat Tailings Site (Site) located near Park City, Utah as depicted on the map attached as Appendix A. This Settlement Agreement also provides for the reimbursement of Future Response Costs incurred by EPA and BLM in connection with the EE/CA and Removal Action for OU2 and OU3. In addition, this Settlement Agreement provides for the preparation of a draft Natural Resource Injury Assessment and Restoration Alternatives Analysis for OU2 and OU3 and the reimbursement of the Natural Resource Trustees' Future Assessment Costs. This Settlement Agreement supersedes and replaces in its entirety the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study, CERCLA Docket No. 08-2009-0007, dated September 29, 2009 between UPCM and the EPA (RI/FS AOC for OU2). Although the RI/FS AOC for OU2 only addressed the preparation and performance of a remedial investigation and feasibility study at OU2, this Settlement Agreement supersedes and replaces in its entirety the RI/FS AOC for OU2 and provides for the preparation and performance of an EE/CA and associated Removal Action for OU2 and OU3.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended (CERCLA). This authority was delegated to the Administrator of EPA and the Secretary of the Interior on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), as amended. This authority was further delegated by the EPA Administrator to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D and by the Interior Secretary to the Director of FWS and the Director of BLM pursuant to Part 207, Chapter 7 of the Department of the Interior's Manual. The authority delegated to the Regional Administrator of EPA Region 8 was further delegated to the Assistant Regional Administrator, Office of Ecosystem Protection and Remediation by EPA Delegation No. 14-14-C. The authority delegated to the Directors of BLM and FWS was further delegated to the BLM State Directors and FWS Regional Directors, respectively.

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), the EPA notified the U.S. Department of the Interior and the State of Utah of the release of hazardous substances that may have resulted in injury to the natural

resources under federal and state trusteeship at OU2 and OU3 and of negotiations with potentially responsible parties.

4. The Parties recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by UPCM in accordance with this Settlement Agreement do not constitute an admission of any liability. UPCM does not admit, and retains the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections V and VI of this Settlement Agreement. Furthermore, UPCM does not admit any responsibility or liability for environmental nor contaminant issues at the Site. The Parties agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon the Parties and their successors and assigns. Any change in ownership or corporate status of UPCM including, but not limited to, any transfer of assets or real or personal property shall not alter UPCM's responsibilities under this Settlement Agreement.

6. UPCM shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. UPCM shall be responsible for any noncompliance with requirements of this Settlement Agreement.

7. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind his or her Party to this Settlement Agreement.

III. STATEMENT OF PURPOSE

8. In entering into this Settlement Agreement, the objectives of the Parties are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from OU2 and OU3 by conducting an engineering evaluation as more specifically set forth in the EE/CA Work Plan attached as Appendix C to this Settlement Agreement; (b) to identify and evaluate alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from these operable units, by conducting a cost analysis as more specifically set forth in the EE/CA Work Plan; (c) to conduct all actions necessary to implement the Removal Action to be selected in the Action Memorandum for OU2 and OU3, in accordance with the Removal Action Work Plan to be developed hereunder; (d) to assess injuries to natural resources and identify and evaluate opportunities for coordinating or integrating implementation of natural resource restoration with the Removal Action to be selected for OU2 and OU3; and (e) to recover

response and assessment costs incurred by the Environmental Agencies with respect to this Settlement Agreement.

9. The Work conducted under this Settlement Agreement is subject to oversight and approval by EPA and, with respect to the Work occurring on or affecting land under the jurisdiction, custody or control of BLM (identified herein as the "Silver Maple Claims"), the concurrence of BLM, and shall provide all appropriate and necessary information to assess conditions at OU2 and OU3 and evaluate alternatives to the extent necessary to select a response action that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 (NCP). UPCM shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidance, policies, and procedures.

10. UPCM shall be responsible for preparing the draft Natural Resource Injury Assessment and Restoration Alternatives Analysis for OU2 and OU3. The draft Natural Resource Injury Assessment and Restoration Alternatives Analysis prepared pursuant to this Settlement Agreement is subject to the approval of the Natural Resource Trustees and shall provide all appropriate and necessary information to identify and quantify any actual and potential injuries to natural resources at OU2 and OU3, including injuries that may have already occurred as a result of the release of hazardous substances at or from OU2 and OU3, and injuries that could result from the preferred Removal Action alternative and evaluate restoration alternatives consistent with the preferred Removal Action alternative.

11. In implementing this Settlement Agreement, UPCM shall coordinate with the Natural Resource Trustees. The Natural Resource Trustees shall be provided with substantial and meaningful opportunities to review and comment on plans, reports, and other items submitted to EPA for approval under this Settlement Agreement in order to ensure (a) that the EE/CA activities undertaken hereunder are coordinated with the Natural Resource Injury Assessment and Restoration Alternatives Analysis; and (b) the identification of potential natural resource restoration alternatives that are consistent and can be implemented with the preferred Removal Action alternative.

IV. DEFINITIONS

12. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"Action Memorandum" shall mean the Action Memorandum that will be issued for OU2 and OU3 upon completion of the EE/CA for OU2 and OU3.

“ASARCO Settlement Funds” shall mean funds recovered by EPA from ASARCO, LLC, pursuant to the Amended Settlement Agreement Regarding Miscellaneous Federal and State Environmental Sites approved by the U.S. Bankruptcy Court for the Southern District of Texas, Corpus Christi Division, on June 5, 2009, resolving among other things the liability of ASARCO, LLC for the Site and deposited by EPA in the Richardson Flat Special Account plus Interest earned on such funds, a portion of which will be used to fund the Richardson Flat Disbursement Account and the balance to be used to finance or reimburse EPA for response actions at or in connection with the Site.

“BLM” shall mean the Bureau of Land Management and any successor departments or agencies of the United States.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

“Cost Summary and Certification” shall mean a summary and certification of cost information to be submitted by UPCM in accordance with Section XIX (Disbursement of Special Account Funds).

“Day” shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

“EE/CA Work Plan” shall mean the work plan for the performance of the EE/CA for OU2 and OU3 attached hereto as Appendix C. The EE/CA Work Plan is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement. In the event of a conflict between this Settlement Agreement and the EE/CA Work Plan, this Settlement Agreement shall control.

“Effective Date” shall be the effective date of this Settlement Agreement as provided in Section XXXV.

“Environmental Agencies” shall mean EPA, BLM, FWS, UDEQ, and the State Natural Resource Trustee.

“EPA” shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

“Federal Environmental Agencies” shall mean EPA, BLM, and FWS.

“Federal Trustees” shall mean BLM and FWS.

“Future Assessment Costs” shall mean all costs incurred by the Natural Resource Trustees in the oversight, review, comment and technical assistance provided on the Natural Resource Injury Assessment and Restoration Alternatives Analysis as further described in the Scope of Work attached hereto as Appendix D.

“Future Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that EPA and BLM incur in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry (“ATSDR”) costs, the costs incurred pursuant to Paragraph 53 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 74 (emergency response), and Paragraph 108 (work takeover).

“FWS” shall mean the U.S. Fish and Wildlife Service and any successor departments or agencies of the United States.

“Institutional Controls” shall mean proprietary controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices that: (i) limit land, water, and/or resource use to minimize the potential for exposure to Waste Materials at the Site; (ii) limit land, water, and/or resource use to implement, ensure non-interference with, or ensure the protectiveness of the Removal Action; and/or (iii) provide information intended to modify or guide human behavior at the Site.

“Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

“Middle Reach” shall mean that portion of OU3, consisting of approximately 116 acres, that is near the eastern end of the Prospector Park in Park City, Utah, and extends to U.S. Highway 40 and includes the Silver Maple Claims portion of the Site. OU3 is depicted generally on the map attached as Appendix A and the Silver Maple Claims portion of OU3 is depicted generally on the map attached as Appendix B.

“National Contingency Plan” or “NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

“Natural Resource Trustees” shall mean FWS, BLM, and the State Natural Resource Trustee.

"Natural Resource Injury Assessment and Restoration Alternatives Analyses" shall mean the activities described in Section X of this Settlement Agreement and the Scope of Work attached hereto as Appendix D.

"OU1" shall mean an area covering approximately 258 acres, which acreage includes a tailings impoundment covering approximately 160 acres of land immediately southeast of the junction of U.S. Highway 40 and Utah Highway 248 in Summit County, Utah.

"OU1 Consent Decree" shall mean the RD/RA Consent Decree for OU1 captioned *United States of America v. United Park City Mines Company* entered on October 4, 2007, by the United States District Court for the District of Utah under case number 2:07-cv-00642.

"OU1 Repository" shall mean the mine waste repository constructed in accordance with the July 7, 2005, Record of Decision selecting the remedy for OU1 of the Site.

"OU2" shall mean Lower Silver Creek, an area bounded by Highway 40 on its southern end and Interstate 80 on its northern end, ranging in width from 2,100 feet at the southern boundary to 3,800 feet near Pivotal Promontory Road, in Township 1 South Range 4 East, in Sections 10, 11, 15, 14, 22, 23, 26, 27, and 35 and approximately 500 feet in Section 2 of Township 2 South Range 4 East, Summit County, Utah and excluding any areas within OU3. OU2 is depicted generally on the map attached as Appendix A.

"OU3" shall mean an area beginning at the southern and most up gradient portion of the Silver Maple Claims and then proceeding downstream to the Middle Reach and including parcels formerly addressed by the RI/FS for OU2 identified as all or a portion of Summit County Assessor parcel numbers SS-28-A-1-X, SS-27-B-X, SS-28-A-X, SS-56, SS-56-A-1, SS-56-UP-X, SS-56-A, SS-64-A, SS-64-1000-UP-X, SS-65-A-3-1, SS-65-A-5, SS-65-A-3, SS-65-1, SS-65-A-6, SS-88 and excluding any areas within OU4. OU3 is depicted generally on the map attached as Appendix A and the Silver Maple Claims are depicted generally on the map attached as Appendix B.

"OU4" shall mean the discharge from the Prospector Drain, which is identified by EPA and UDEQ as a point source pursuant to the Clean Water Act that has caused or has the potential to cause a release of hazardous substances at or from the Site and includes any areas in close proximity necessary to accomplish the response action goals for OU4. OU4 is depicted generally on the map attached hereto as Appendix A.

"Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

"Parties" shall mean EPA, BLM, FWS, UDEQ, UDPR, the State Natural Resource Trustee, and UPCM.

“UPCM” shall mean United Park City Mines Company.

“Removal Action” shall mean all actions necessary to implement the non-time critical removal action remedy to be selected in the Action Memorandum for OU2 and OU3 at the conclusion of the EE/CA for OU2 and OU3 including post-removal site controls.

“Removal Action Work Plan” shall mean the work plan to be developed in accordance with this Settlement Agreement for the implementation of the Removal Action for OU2 and OU3. The Removal Action Work Plan shall include annual Work Milestones for each construction season. The Removal Action Work Plan will be incorporated into this Settlement Agreement and will be an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement. In the event of a conflict between this Settlement Agreement and the Removal Action Work Plan, this Settlement Agreement shall control.

“Richardson Flat Disbursement Account” shall mean the special account, within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

“Richardson Flat Special Account” shall mean the special account within the EPA Hazardous Substance Superfund established for the Site to conduct or finance response actions at or in connection with the Site or to be transferred by EPA to the EPA Hazardous Substance Superfund.

“RI/FS AOC for OU2” shall mean the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study, CERCLA Docket No. 08-2009-0007, dated September 29, 2009, between UPCM and EPA. As of the Effective Date, the RI/FS AOC for OU2 is superseded and replaced in its entirety by this Settlement Agreement.

“Section” shall mean a portion of this Settlement Agreement identified by a Roman numeral.

“Settlement Agreement” shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXXIV). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

“Silver Maple Claims” shall mean that portion of the Site comprising public land under the jurisdiction, custody, or control of the BLM, consisting of approximately 34 acres, near the eastern end of the Prospector Park in Park City, Utah, as depicted generally on the map attached as Appendix B.

"Site" shall mean the areas depicted generally as OU1, OU2, OU3, and OU4 on the map attached as Appendix A. The Site shall also include any areas in close proximity to the property previously described and necessary to accomplish the response action goals.

"State" or "State of Utah" shall mean the State of Utah by and through UDEQ, UDPR and the State Natural Resource Trustees.

"State Natural Resource Trustee" shall mean the Natural Resource Trustees for the State of Utah appointed by the governor, the Deputy Director of the Utah Department of Environmental Quality and the Executive Director of the Utah Department of Natural Resources, and successors as may be appointed by the governor.

"State Lead Natural Resource Trustee" shall mean the Deputy Director of the Utah Department of Environmental Quality and successor State Lead Natural Resource Trustees as may be appointed by the governor.

"UDEQ" shall mean the State of Utah Department of Environmental Quality.

"UDPR" shall mean the State of Utah Division of Parks and Recreation.

"Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33).

"Work" shall mean all activities UPCM is required to perform under the EPA-approved EE/CA Work Plan or any other work plan developed and approved by EPA pursuant to this Settlement Agreement and subject to EPA approval, except those activities required by Section XV (Retention of Records).

"Work Milestones" shall mean all activities and tasks necessary to complete components of the Removal Action to be defined in the Removal Action Work Plan and shall be established for each annual construction season.

V. FINDINGS OF FACT

13. Mining operations undertaken by various entities within the Park City Mining District produced substantial quantities of ore between 1875 and 1982. As a result of contamination resulting from such operations, EPA proposed to include what is now OU1 of the Richardson Flat Tailings Site on the National Priorities List (NPL) on June 24, 1988. Due to scoring issues and comments received from UPCM and others during the public comment period, OU1 was removed from NPL consideration in February 1991. OU1 was re-proposed for the NPL on February 7, 1992. No action has been taken with regard to finalizing this proposed listing.

14. Since the proposed listing, the Site has been reconfigured to include Lower Silver Creek, and EPA has organized the Site into four operable units (OUs).

15. On July 7, 2005, EPA, with the concurrence of UDEQ, issued a Record of Decision selecting the remedy for OU1. The selected remedy provided for removing contaminated sediments from nearby wetlands and covering contaminated sediments in diversion ditches. In addition, the remedy provided for the consolidation and capping of waste material in a repository (OU1 Repository), and imposing appropriate institutional controls. The OU1 Record of Decision was subsequently modified to allow for the removal of contaminated sediments in the diversion ditches. UPCM is implementing this remedy in accordance with the provisions of the OU1 Consent Decree.

16. EPA initially designated OU2 of the Site to address mine waste and tailings created by various entities that had been transported downstream of OU1 along the banks of Lower Silver Creek, from U.S. Highway 40 on the southern end to Interstate 80 on the northern end. UPCM agreed to perform a remedial investigation and feasibility study pursuant to the RI/FS AOC for OU2 executed in September 2009. Thereafter, EPA reconfigured the Site to identify additional operable units.

17. OU2 encompasses approximately 1,875 acres along Lower Silver Creek north and east of Highway 40.

18. OU3 encompasses approximately 836 acres located east of Park City in areas along Silver Creek. OU3 includes the Middle Reach, and parcels comprising approximately 720 acres of land along the flood plain of Silver Creek that were formerly part of OU2 (all or portions of Summit County Assessor parcel numbers SS-28-A-1-X, SS-27-B-X, SS-28-A-X, SS-56, SS-56-A-1, SS-56-UP-X, SS-56-A, SS-64-A, SS-64-1000-UP-X, SS-65-A-3-1, SS-65-A-5, SS-65-A-3, SS-65-1, SS-65-A-6, and SS-88).

19. OU4 consists of the outfall from Prospector Drain, an underground pipe that runs in the vicinity of a subdivision of Park City known as Prospector Square and a municipal park named Prospector Park. The Prospector Drain collects shallow groundwater from areas in and around Prospector Park and Prospector Square. It then discharges a portion of this flow to a constructed treatment wetland and the remainder to a natural wetland area on or near the Silver Maple Claims. OU4 also includes any areas in close proximity to the Prospector Drain necessary to accomplish the response action goals. The Prospector Drain was constructed in conjunction with the development of the Prospector Park and Prospector Square area during the late 1970s when buildings were built atop tailings material. On February 19, 2013, Park City Municipal Corporation entered into an Administrative Order on Consent to conduct an EE/CA and removal action at OU4. This Settlement Agreement does not require UPCM to undertake any actions with respect to OU4.

20. Soil samples in some areas have indicated elevated concentrations of lead, arsenic, and other metals and surface water samples have indicated elevated zinc and cadmium within OU2 and OU3.

21. The primary land use on and around OU2 and OU3 is residential, business/commercial, and commercial livestock grazing. However, the land is also used for recreational purposes. A former rail line has been converted to a recreational trail and is now used extensively for hiking, biking, observing wildlife and accessing Silver Creek for fishing. The area in and around OU2 and OU3 includes habitat for various fish and wildlife species.

22. UPCM is a Delaware corporation doing business in Utah. UPCM and others conducted various mining related operations within the Park City Mining District until approximately 1969. These activities included the mining of ore from the Ontario and Daly West mines. EPA asserts that mining waste from these operations has been carried down-stream and has impacted portions of the Site. UPCM owns portions of OU3 known as the "floodplain tailings area" which is located east of U.S. Highway 40, south of Utah Highway 248 and west of the old Union Pacific Railroad right-of-way, approximately twenty-two (22) acres in size.

23. On behalf of the United States, BLM has jurisdiction, custody or control of the Silver Maple Claims.

24. UDPR was deeded the Union Pacific Railroad right-of-way (which runs along Silver Creek through OU3) on May 11, 1989 pursuant to the National Trail System Act (Trails Act), 16 U.S.C. § 1247 et seq., and a decision of the Interstate Commerce Commission. The Trails Act provides for the preservation of discontinued railroad rights-of-way by banking the rights-of-way for possible future reactivation, and in the interim, making the railroad corridor available for use as a recreational trail. It is the expectation of the Environmental Agencies that the integrity of the Rail Trail will be preserved for interim trail use and restored to its state prior to the commencement of remediation and construction work required by EPA.

25. Exposure to heavy metals including lead, cadmium and arsenic may cause adverse health effects in humans. Ecosystems near sources of heavy metals may also experience adverse effects including loss of biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

26. Based on the Findings of Fact set forth above, and the administrative record supporting this response action, EPA has determined that:

a. OU2 and OU3 are a "facilities" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at OU2 and OU3, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of hazardous substances from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

d. UPCM is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

e. UPCM is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). UPCM is or was an "owner" and/or "operator" of a facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

f. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective removal actions and minimize litigation, 42 U.S.C. § 9622(a).

g. EPA and BLM have determined that UPCM is qualified to conduct the Work pursuant to this Settlement Agreement within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), by complying with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

27. Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the administrative record for this Site, it is hereby ordered and agreed that the Parties shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

28. EE/CA

a. All Work conducted under this Settlement Agreement in performance of the EE/CA shall be under the direction and supervision of qualified personnel.

b. UPCM has notified EPA that it intends to use the following personnel in carrying out the EE/CA Work: UPCM personnel under the direction of Kerry C. Gee, and Resource & Environmental Management Consultants, Inc., under the direction of James Fricke. EPA hereby approves UPCM's selection of the foregoing contractors and personnel. UPCM shall notify EPA in writing of any changes or additions in the contractors or personnel used to carry out such Work, providing names, titles, and qualifications. EPA shall have the right to disapprove changes and additions to contractors or personnel in its discretion. If EPA disapproves in writing of any person's or contractor's technical qualifications, UPCM shall notify EPA of the identity and qualifications of the replacement within thirty (30) Days of the written notice. If EPA disapproves of designated contractors or personnel, UPCM shall retain different contractors or personnel and shall notify EPA of the name(s), address(es), telephone number(s) and qualifications within fifteen (15) Days following EPA's disapproval.

c. UPCM has designated Kerry C. Gee as its project coordinator who shall be responsible for administration of all EE/CA actions by UPCM required pursuant to this Settlement Agreement. EPA hereby approves UPCM's selection of the foregoing project coordinator. To the greatest extent possible, the project coordinator shall be present on the Site or readily available during the Work. UPCM shall have the right to change its project coordinator, subject to EPA's right to disapprove. UPCM shall notify EPA thirty (30) Days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. If EPA disapproves of the designated project coordinator, UPCM shall retain a different project coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within fifteen (15) Days following EPA's disapproval.

29. Removal Action.

a. All Work conducted under this Settlement Agreement by UPCM in performance of the Removal Action shall be under the direction and supervision of qualified personnel. Within sixty (60) Days following issuance of the Action Memorandum for OU2 and OU3, and before the Removal Action Work commences, UPCM shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, UPCM shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standards Institute, 1994, or more recent version), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for UPCM shall be subject to EPA's review, for verification that such persons meet minimal technical background and experience requirements. This Settlement Agreement is contingent on UPCM's demonstration to EPA's satisfaction that it is qualified to perform properly and promptly the Work. If EPA disapproves in writing of any person's technical qualifications, UPCM shall notify EPA of the identity and

qualifications of the replacement within thirty (30) Days following the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement, to conduct the removal, and to seek reimbursement of costs and penalties from UPCM. UPCM shall notify EPA in writing of any changes or additions in the personnel used to carry out the Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

b. Within fifteen (15) Days following issuance of the Action Memorandum, UPCM shall designate a project coordinator who shall be responsible for administration of the Removal Action Work and shall submit to EPA the designated project coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, project coordinator shall be present on the Site or readily available during performance of the Work. EPA retains the right to disapprove of a designated project coordinator. If EPA disapproves of the designated project coordinator, UPCM shall retain a different project coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within fifteen (15) Days following EPA's disapproval. Receipt by UPCM's project coordinator shall constitute receipt by UPCM of any notice or communication from EPA relating to this Settlement Agreement.

30. EPA has designated Kathryn Hernandez of EPA's Ecosystems Protection and Remediation Office, Region 8, as its project coordinator. EPA will notify UPCM of a change of EPA's designated project coordinator. UPCM shall direct all submissions required by this Settlement Agreement regarding the Work to EPA's project coordinator at:

Kathryn Hernandez
Project Manager
Superfund Remedial Section, 8EPR-RA
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, Colorado 80202
hernandez.kathryn@epa.gov

BLM has designated Trent Duncan as its project coordinator. BLM will notify UPCM of a change of BLM's designated project coordinator. UPCM shall direct all submissions required to be sent to BLM by this Settlement Agreement regarding the Work to BLM's project coordinator at:

Trent Duncan
BLM Utah State Office
440 West 200 South, Suite 500
Salt Lake City, Utah 84101
tduncan@blm.gov

31. EPA's project coordinator shall have the authority lawfully vested in a remedial project manager (RPM) and on-scene coordinator (OSC) by the NCP. In addition, EPA's project coordinator shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when she determines that conditions at OU2 or OU3 may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA project coordinator from the Site shall not be cause for the stoppage or delay of Work.

32. EPA is the party responsible for oversight of UPCM's performance of the Work pursuant to this Settlement Agreement with opportunity for substantial and meaningful involvement by UDEQ, and subject to the concurrence of BLM with regard to activities on or affecting Silver Maple Claims. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the EE/CA as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe all Work and make inquiries in the absence of EPA, but not to modify the EE/CA Work Plan.

33. EPA, BLM, and UPCM shall have the right, subject to Paragraph 28 or 29, to change its designated project coordinator. UPCM shall notify EPA thirty (30) Days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice. If EPA disapproves of the change in any designated project coordinator, UPCM shall retain a different project coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within fifteen (15) Days following EPA's disapproval.

IX. EE/CA WORK TO BE PERFORMED

34. UPCM shall conduct the EE/CA for OU2 and OU3. UPCM shall conduct the Work activities related to performance of the EE/CA in accordance with the provisions of this Settlement Agreement, the EE/CA Work Plan attached hereto as Appendix C, CERCLA, the NCP, and EPA guidance. Upon the Effective Date of this Settlement Agreement, the RI/FS AOC for OU2 is superseded and replaced in its entirety by this Settlement Agreement and all of UPCM's obligations under the RI/FS AOC for OU2 are terminated and replaced in their entirety by those obligations set forth in this Settlement Agreement. UPCM and EPA are also signatories to the OU1 Consent Decree which governs UPCM's obligations to perform work at OU1. Nothing in this Settlement Agreement alters UPCM's obligations under the OU1 Consent Decree.

35. The Engineering Evaluation (EE) shall consist of collecting data to characterize conditions at OU2 and OU3, determining the nature and extent of the contamination at or from OU2 and OU3, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Cost Analysis (CA) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for removal actions to prevent, mitigate or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants or contaminants at or from OU2 and OU3. The alternatives

evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, and shall include removal actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, UPCM shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.415 of the NCP, 40 C.F.R. § 300.415 and applicable guidance. Upon request by EPA, UPCM shall submit in electronic form all portions of any plan, report or other deliverable required to submit pursuant to provisions of this Settlement Agreement.

36. Upon receipt of the draft EE/CA report (which shall contain UPCM's evaluation of the durability, reliability and effectiveness of any proposed Institutional Control) EPA will evaluate, as necessary, the estimates of risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability and effectiveness of any proposed Institutional Controls. Upon completion of the EE/CA, and following a public comment period, EPA, and, to the extent removal activities will occur on or affect the Silver Maple Claims, BLM, with UPCM's input, will issue the Action Memorandum detailing the scope of removal actions, if any, required for OU2 and OU3.

37. Modification of the EE/CA Work Plan

a. If UPCM identifies a need for additional data, UPCM shall submit a memorandum documenting the need for additional data to the EPA project coordinator within seven (7) Days of identification. EPA in its discretion will determine whether the additional data shall be collected by UPCM and whether it will be incorporated into plans, reports and other deliverables.

b. In the event of unanticipated or changed circumstances at OU2 or OU3, UPCM shall notify the EPA project coordinator within twenty-four (24) hours following discovery of the unanticipated or changed circumstances. In the event EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the EE/CA Work Plan, EPA shall modify or amend the EE/CA Work Plan in writing accordingly in a manner not inconsistent with UPCM's obligations under this Settlement Agreement. UPCM shall perform the EE/CA Work Plan as modified or amended.

c. EPA may, after consultation with UPCM, determine that in addition to tasks defined in the initially approved EE/CA Work Plan, other additional Work consistent with Section III (Statement of Purpose) may be necessary to accomplish the objectives of the EE/CA. UPCM agrees to perform these actions in addition to those required by the initially approved EE/CA Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete EE/CA.

d. UPCM shall confirm its willingness to perform the additional Work in writing to EPA within seven (7) Days of receipt of the EPA request. If UPCM objects to any modification determined by EPA to be necessary pursuant to this Paragraph, UPCM may seek dispute

resolution pursuant to Section XX (Dispute Resolution). The EE/CA Work Plan shall be modified in accordance with the final resolution of the dispute.

e. UPCM shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the EE/CA Work Plan or written EE/CA Work Plan supplement. Subject to Paragraph 108, EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from UPCM and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's or BLM's authority to require performance of further response actions at the Site.

38. Meetings. UPCM shall make presentations at, and participate in, meetings with the Environmental Agencies at the request of EPA during the initiation, conduct, and completion of the EE/CA. In addition to discussion of the technical aspects of the EE/CA, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

39. Progress Reports. In addition to the plans, reports and other deliverables set forth in this Settlement Agreement, UPCM shall provide to the Environmental Agencies quarterly progress reports by the 15th Day of each January, April, July and October following the Effective Date until completion of the EE/CA. At a minimum, with respect to the preceding quarter, these progress reports shall (1) describe the actions which have been taken by UPCM to comply with this Settlement Agreement during that quarter, (2) include all results of sampling and tests and all other data received by UPCM, (3) describe Work planned for the next two quarters with schedules relating such Work to the overall project schedule for EE/CA completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays. These quarterly progress reports shall be delivered to each of the recipients designated in this Paragraph 39 electronically.

40. Quality Assurance. UPCM shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the EE/CA Work Plan, the QAPP and guidances identified therein. UPCM will assure that field personnel used by UPCM are properly trained in the use of field equipment and in chain of custody procedures. UPCM shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

41. Sampling

a. All results of sampling, tests, modeling, or other data (including raw data) generated by UPCM, or on its behalf, during the period that this Settlement Agreement is effective, shall be submitted to the Environmental Agencies in the next quarterly progress report. EPA will make

available to UPCM validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. UPCM shall verbally notify the Environmental Agencies at least thirty (30) Days prior to conducting significant field events as described in the EE/CA Work Plan or Sampling and Analysis Plan. UDPR shall also be notified at least thirty (30) Days in advance for any such field events to take place on property owned or managed by UDPR. At EPA's verbal or written request, or the request of EPA's oversight assistant, UPCM shall allow split or duplicate samples to be taken by the Environmental Agencies (and their authorized representatives) of any samples collected in implementing this Settlement Agreement. All split or duplicate samples shall be analyzed by the methods identified in the QAPP. Upon request, EPA shall allow UPCM to take split or duplicate samples of any samples collected by EPA as part of EPA's oversight of the UPCM's performance of the Work.

42. UPCM shall submit to the Environmental Agencies two (2) copies of all plans, reports or other submissions required by this Section IX, the EE/CA Work Plan, and any other approved work plans. UPCM shall also submit a copy of all such plans, reports or other submission to UDPR if they affect property owned or managed by UDPR. Upon request by EPA, UPCM shall submit such documents in electronic form.

X. NATURAL RESOURCE INJURY ASSESSMENT AND RESTORATION ALTERNATIVES ANALYSES TO BE PERFORMED

43. UPCM shall prepare a draft Natural Resource Injury Assessment and Restoration Alternatives Analysis for OU2 and OU3 in accordance with the NRDA Scope of Work attached hereto as Appendix D concurrently with its development of the EE/CA and in coordination with the Natural Resource Trustees. UPCM shall collect data in coordination with the Natural Resource Trustees to determine and quantify any actual or potential natural resource injuries at OU2 and OU3. As provided in the NRDA Scope of Work attached hereto as Appendix D, these data collection activities shall be coordinated or integrated with data collection activities conducted by UPCM in preparing the EE/CA to the extent practicable. Upon issuance of the final EE/CA report and in accordance with the provisions of 43 C.F.R Part 11, UPCM shall, in coordination with the Natural Resource Trustees, identify potential restoration alternatives that can be coordinated with the preferred Removal Action alternative identified for OU2 and OU3. Such projects shall be evaluated consistent with 43 C.F.R §11.82. Restoration alternatives must be consistent with NRDA restoration under CERCLA and must be analyzed by the Federal Natural Resource Trustees under the National Environmental Policy Act consistent with the procedures outlined in Appendix D. The Natural Resource Trustees intend to prepare NEPA documents and/or other documentation that may be required of them pursuant to 43 C.F. R. Part 11 and the NCP.

XI. PERFORMANCE OF REMOVAL

44. UPCM shall implement the Action Memorandum for OU2 and OU3 and perform all actions necessary for the performance of the Removal Action. The actions to be implemented will be identified in a separate Removal Action Work Plan for OU2 and OU3 to be developed in accordance with this Settlement Agreement. The Action Memorandum shall be issued no sooner than sixty (60) Days after approval of the final EE/CA report.

45. **Removal Action Work Plan and Implementation.**

a. Within ninety (90) Days after issuance of the Action Memorandum, UPCM shall submit to EPA for approval a draft OU2 and OU3 Removal Action Work Plan for performance of the Removal Action. The draft Removal Action Work Plan shall provide a description of and a phased schedule for the actions required to implement the Removal Action and post-removal site controls. Using information gathered during the performance of the EE/CA, UPCM will outline this phased schedule in the Removal Action Work Plan as a series of Work Milestones to be completed in the implementation of the Removal Action. Any such Work Milestones will specify the discrete segments of the Removal Action Work.

b. EPA may, after a reasonable opportunity for substantial and meaningful involvement by UDEQ, approve, disapprove, require revisions to, or modify the draft Removal Action Work Plan in whole or in part. EPA approval of Work activities affecting the Silver Maple Claims is subject to BLM concurrence. If EPA requires revisions, UPCM shall submit a revised draft Removal Action Work Plan within thirty (30) Days following receipt of EPA's notification of the required revisions. Unless otherwise expressly provided in this Settlement Agreement, UPCM shall implement the Removal Action Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Action Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable against UPCM under this Settlement Agreement.

c. UPCM shall not commence any Work except in conformance with the terms of this Settlement Agreement. UPCM shall not commence implementation of the Removal Action Work Plan until receiving written EPA approval pursuant to Paragraph 45(b).

46. **Removal Health and Safety Plan.** Within sixty (60) Days after EPA issues the Action Memorandum, UPCM shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of the Removal Action. The plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. UPCM shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the Removal Action.

47. Removal Quality Assurance and Sampling.

a. UPCM shall prepare a Quality Assurance Project Plan (QAPP) in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002).

b. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. UPCM shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. UPCM shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1990), as guidance for QA/QC and sampling. UPCM shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standards Institute, 1994 or more recent version), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the Quality System requirements.

c. Upon request by EPA, UPCM shall have such a laboratory analyze samples submitted by EPA for QA monitoring. UPCM shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

d. Upon request by EPA, UPCM shall allow EPA or its authorized representatives to take split and/or duplicate samples. UPCM shall notify EPA not less than thirty (30) Days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow UPCM to take split or duplicate samples of any samples it takes as part of its oversight of UPCM's implementation of the Work.

48. Removal Reporting.

a. UPCM shall submit a quarterly written progress report to the Environmental Agencies concerning its actions undertaken pursuant to this Settlement Agreement on every 15th Day of January, April, July and October after the date of receipt of EPA's approval of its Removal Action Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by the EPA project coordinator. These reports shall describe all significant developments during the preceding reporting period, including the actions performed and any problems

encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. UPCM shall, at least thirty (30) Days prior to the conveyance of any interest in real property held by UPCM at OU2 or OU3, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to the Environmental Agencies of the proposed conveyance, including the name and address of the transferee. UPCM also agrees to require that its successors comply with this notice requirement and Sections XII (Site Access and Institutional Controls) and XIV (Access to Information).

49. Final Removal Report. Within thirty (30) Days after completion of all Work required under this Settlement Agreement, UPCM shall submit for EPA review and approval a final report summarizing its actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-site or handled on-site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the Removal Action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

50. UPCM shall submit to the Environmental Agencies two (2) copies of all plans, reports or other submissions required by this Section XI and any approved work plan. Upon request by EPA, UPCM shall submit such documents in electronic form.

51. Off-Site Shipments.

a. If and when it becomes necessary to send Waste Material to an off-site location for disposal, UPCM shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the EPA project coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed ten (10) cubic yards.

Consistent with EPA's previous determination regarding the applicability of the off-site rule at the Site, the OU1 Repository shall not be considered an off-site location for the purposes of this Paragraph.

i. UPCM shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. UPCM shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by UPCM following the award of the contract for the EE/CA or Removal Action as applicable. UPCM shall provide the information required by Paragraph 51 (a) and (b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, UPCM shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. UPCM shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

52. If any portion of the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by UPCM, UPCM shall, commencing on the Effective Date, provide the Environmental Agencies and their representatives, including contractors, with access at all reasonable times to such property, for the purpose of conducting any activity related to this Settlement Agreement.

53. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than UPCM, UPCM shall use its best efforts to obtain all necessary access agreements within thirty (30) Days after UPCM becomes aware that such access is needed, or as otherwise specified in writing by the EPA project coordinator. UPCM shall notify EPA if after using its best efforts it is unable to obtain such agreements. UPCM shall describe in writing its efforts to obtain access. If UPCM cannot obtain access agreements, EPA may either (i) obtain access for UPCM or assist UPCM in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the obligation under the Settlement Agreement that requires the access agreement in question. UPCM shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs and Assessment Costs). If EPA performs those tasks or activities with EPA contractors, UPCM shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all

costs incurred in performing such tasks or activities. UPCM shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports and other deliverables.

54. BLM shall, with respect to the Silver Maple Claims provide EPA, UPCM, and the State, and their representatives, contractors, and subcontractors, with access at all reasonable times to this property to conduct any activity related to this Settlement Agreement.

55. UDPR shall, with respect to any property at the Site that it owns or controls provide the Environmental Agencies and UPCM, and their representatives, contractors, and subcontractors, with access at all reasonable times to this property to conduct any activity related to this Settlement Agreement.

56. Notwithstanding any provision of this Settlement Agreement, EPA, BLM, and UDEQ retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

57. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to UPCM, EPA shall, after a reasonable opportunity for review and comment by UDEQ: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that UPCM modify the submission; or (e) any combination of the above. Any disapproval or modification shall be consistent with the purposes of this Settlement Agreement set forth in Section III. However, EPA shall not modify a submission without first providing UPCM at least one notice of deficiency and an opportunity to cure within thirty (30) Days, except where doing so would cause serious disruption to the Work, would delay an emergency response, or where previous submission(s) have been disapproved due to material defects. EPA approval of, and the implementation of, any Work on or affecting the Silver Maple Claims shall be subject to the concurrence of BLM.

58. In the event of approval, approval upon conditions, or modification by EPA, pursuant to subparagraph 57(a), (b), (c) or (e), UPCM shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, UPCM shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to subparagraph 57(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XXII (Stipulated Penalties).

59. Resubmission.

a. Upon receipt of a notice of disapproval, UPCM shall, within thirty (30) Days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XXII, shall accrue during the 30 Day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 57 and 58.

b. Notwithstanding the receipt of a notice of disapproval, UPCM shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve UPCM of any liability for stipulated penalties under Section XXII (Stipulated Penalties).

c. UPCM shall not proceed further with any subsequent Work until receiving EPA approval, approval on condition or modification of the following deliverables: EE/CA Sampling and Analysis Plan, Draft Engineering Evaluation Report and Treatability Testing Work Plan and Draft Cost Analysis Report. While awaiting EPA approval, approval on condition or modification of these deliverables, UPCM shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in subparagraph (c) or subsequently identified in the Removal Action Work Plan in accordance with subparagraph (e), UPCM shall proceed with all subsequent Work including all tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop UPCM from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the EE/CA.

e. Designation of the Removal Action deliverables that require UPCM to halt any subsequent activities or tasks until receiving EPA approval, approval on condition or modification, shall be identified in the Removal Action Work Plan.

60. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct UPCM to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report or other deliverable. UPCM shall implement any such plan, report, or deliverable as corrected, modified or developed by EPA, subject only to UPCM's right to invoke the procedures set forth in Section XX (Dispute Resolution).

61. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, UPCM shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless UPCM invokes the dispute resolution procedures in accordance with Section XX (Dispute Resolution) and EPA's action is revoked or

substantially modified pursuant to a dispute resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XX (Dispute Resolution) and Section XXII (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during dispute resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified or superseded as a result of a decision or agreement reached pursuant to the dispute resolution process set forth in Section XX, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XXII.

62. In the event that EPA takes over some of the Work, but not the preparation of the EE report or the CA report, UPCM shall incorporate and integrate information supplied by EPA into the final report.

63. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement. Attached hereto as Appendix E is a list of the major deliverables under this Settlement Agreement.

64. Neither failure of EPA to expressly approve or disapprove of UPCM's submission within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Regardless of whether EPA gives express approval for UPCM's deliverables, UPCM is responsible for preparing deliverables acceptable to EPA.

XIV. ACCESS TO INFORMATION

65. Upon request, UPCM shall provide to the Environmental Agencies copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at OU2, OU3, the Work, or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. UPCM shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work. With the exception of confidential or privileged information described in Paragraphs 66 and 67, below, EPA shall make all such information, upon request, available to the Parties.

66. UPCM may assert business confidentiality claims covering part or all of the documents or information submitted to the Environmental Agencies under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential

by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified UPCM that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to submitting UPCM. UPCM may assert business confidentiality claims covering part or all of the documents or information submitted to the State under this Settlement Agreement to the extent permitted by and in accordance with Utah Government Records Access and Management Act, Utah Code § 63G-2-309, and where applicable, the Utah Environmental Quality Code, Utah Code § 19-1-306. If UPCM provides the State a record that it believes should be protected, UPCM must submit with the record a written claim of business confidentiality and a concise statement of reasons supporting the claim, or the public may be given access to such records without further notice to UPCM. UPCM shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which UPCM asserts business confidentiality claims.

67. UPCM may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by applicable law. If UPCM asserts such a privilege in lieu of providing documents, it shall provide the Environmental Agencies with the following: (i) the title of the document, record, or information; (ii) the date of the document, record, or information; (iii) the name and title of the author of the document, record, or information; (iv) the name and title of each addressee and recipient; (v) a general description of the contents of the document, record, or information; and (vi) the privilege asserted by UPCM.

68. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around OU2 or OU3.

69. In entering into this Settlement Agreement, UPCM waives any objections to any data gathered, generated, or evaluated by the Environmental Agencies in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Settlement Agreement or any EPA-approved work plans or sampling and analysis plans. If UPCM objects to any other data, UPCM shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) Days of the quarterly progress report containing the data.

XV. RECORD RETENTION

70. During the pendency of this Settlement Agreement and for a minimum of ten (10) years after UPCM's receipt of EPA's notification pursuant to Section XXXII (Notice of Completion of

Work), UPCM shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to OU 2 and OU3, regardless of any corporate retention policy to the contrary. Until ten (10) years after UPCM's receipt of EPA's notification pursuant to Section XXXII (Notice of Completion of Work), UPCM shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

71. At the conclusion of this document retention period, UPCM shall notify EPA and UDEQ at least ninety (90) Days prior to the destruction of any such records or documents, and, upon request by EPA or UDEQ, UPCM shall deliver any such records or documents to EPA or UDEQ. UPCM may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If UPCM asserts such a privilege, it shall provide EPA or UDEQ with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a general description of the subject of the document, record, or information; and 6) the privilege asserted by UPCM.

72. UPCM hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding OU2 or OU3 since notification of potential liability by EPA or the State and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XVI. COMPLIANCE WITH OTHER LAWS

73. UPCM shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable state and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws. UPCM shall identify ARARs, subject to EPA approval, as part of the EE/CA.

XVII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

74. In the event of any action or occurrence resulting from performance of Work which causes or threatens a release of Waste Material from OU2 or OU3 that constitutes an emergency

situation or may present an immediate threat to public health or welfare or the environment, UPCM shall immediately take all appropriate action. UPCM shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. UPCM shall also immediately notify the EPA project coordinator or, in the event of his/her unavailability, an on scene coordinator (OSC) or Laura Williams, Emergency Response Unit, EPA Region 8 Preparedness, Assessment and Emergency Response Program, at 303-312-6108, and the Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 of the incident or conditions at OU2 or OU3. In the event that UPCM fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, UPCM shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs and Assessment Costs).

75. In addition, in the event that UPCM becomes aware of or should have been aware of any release of a hazardous substance from OU2 or OU3, UPCM shall immediately notify the EPA project coordinator, an OSC or the Regional Duty Officer at Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 and the National Response Center at (800) 424-8802. UPCM shall submit a written report to EPA within seven (7) Days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

XVIII. PAYMENT OF RESPONSE COSTS AND ASSESSMENT COSTS

76. Payments of Future Response Costs.

a. UPCM shall pay to EPA all Future Response Costs incurred by EPA not inconsistent with the NCP for OU2 and OU3. On a periodic basis, EPA will send UPCM a bill requiring payment that includes a Region 8 cost summary. UPCM shall make all payments within thirty (30) Days following receipt of each bill requiring payment, except as otherwise provided in Paragraph 78 of this Settlement Agreement. Payment shall be made to EPA as follows.

U.S. Postal Service UPS, Federal Express, or Overnight Mail

U.S. E.P.A.
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000

U.S. Bank
Government Lockbox 979076 US
EPA Superfund Payments
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101
314-418-1028

Or by electronic transfer in accordance with the ETF instructions at
http://www.epa.gov/cfo/finservices/payment_instructions.htm

All payments shall be accompanied by a statement identifying the name and address of the party making payment, the Site name, the EPA Region and Site/Spill ID Number 08-94, and the EPA docket number for this action.

b. At the time of payment, UPCM shall send notice that its payment has been made to:

U.S. EPA Region 8 Finance Program Manager
Superfund Remedial Section, 8TMS-FMP
1595 Wynkoop Street
Denver, Colorado 80202

and to:

Maureen O'Reilly
Superfund Enforcement
U.S. EPA Region 8
8ENF-RC
1595 Wynkoop Street
Denver, CO 80202

and by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

c. The total amounts to be paid pursuant to subparagraph (a) above shall be deposited in the Richardson Flat Tailings Site Special Account within the EPA Hazardous Substance Superfund to be retained and used by EPA to conduct or finance response actions at or in connection with the Site or to be transferred by EPA to the EPA Hazardous Substance Superfund.

d. UPCM shall pay to BLM all Future Response Costs incurred by BLM not inconsistent with the NCP and related to Work for OU2 or OU3 on or affecting the Silver Maple Claims. On a periodic basis, BLM will send UPCM a bill requiring payment that includes a cost summary. UPCM shall make all payments within 30 Days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 78 of this Settlement Agreement. Payment shall be made to the Department of the Interior's (DOI) Central Hazardous Materials Fund (CHF) by automated clearing-house known as the Department of the Treasury's Automated Clearing House (ACH)/Remittance Express program as follows:

Receiver name: Central Hazardous Materials Fund
ALC 14010001
Receiver Tax ID Number: 53-0196949
Receiver address: 7401 West Mansfield Ave.
Mailstop D-2777
Lakewood, CO 80235
Receiver bank: Federal Reserve Bank
New York, NY
ABA # 051036706
Receiver ACH Account No.: 312024

UPCM shall send notification of its payment referencing the amount of its payment, the Site name, and the time period for which reimbursement of response costs is being provided to the following individuals:

Courtney Hoover
Fund Manager
Central Hazardous Materials Fund
Department of the Interior
1849 C Street, N.W., Mail Stop 2342
Washington, D.C. 20240

Casey S. Padgett
Assistant Solicitor
Office of the Solicitor
1849 C Street, N.W., Mail Stop 5530
Washington, D.C. 20240

e. UPCM shall pay to the Natural Resource Trustees all Future Assessment Costs incurred by the Natural Resource Trustees for OU2 and OU3. On a periodic basis, the Federal Trustees and the State Natural Resource Trustee will each send UPCM a bill requiring payment that includes a cost summary. UPCM shall make all payments within thirty (30) Days following receipt of each bill requiring payment, except as otherwise provided in Paragraph 78 of this Settlement Agreement. Payment shall be made and notification of such payment shall be given in accordance with the instructions included with the bill.

77. If UPCM does not pay Future Response Costs or Future Assessment Costs within thirty (30) Days following its receipt of a bill, UPCM shall pay Interest on the unpaid balance of such Future Response Costs or Future Assessment Costs. The Interest on unpaid Future Response Costs or Future Assessment Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA, BLM or the Natural Resource Trustees receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available by virtue of

UPCM's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XXII. UPCM shall make all payments required by this Paragraph in the manner described in Paragraph 76.

78. a. UPCM may contest payment of any Future Response Costs or Future Assessment Costs under Paragraph 76 if it determines that EPA, BLM or the Natural Resource Trustees have made an accounting error, made claims for Future Assessment Costs inconsistent with 43 C.F.R. Part 11, or if it believes EPA or BLM incurred excess costs as a direct result of an EPA or BLM action that was inconsistent with the NCP. Such objection shall be made in writing within thirty (30) Days following receipt of the bill and must be sent to the appropriate agency. Any such objection shall specifically identify the contested Future Response Costs or Future Assessment Costs and the basis for objection. In the event of an objection, UPCM shall within the thirty (30) Day period pay all uncontested Future Response Costs or Future Assessment Costs to the appropriate agency in the manner described in Paragraph 76.

b. UPCM shall, at the time of submitting its objection in writing in accordance with subparagraph (a) above, establish an interest-bearing escrow account in a federally-insured bank duly chartered in Utah and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs or Future Assessment Costs. UPCM shall send to the appropriate agency a copy of the transmittal letter and check paying the uncontested Future Response Costs or Future Assessment Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, UPCM shall initiate the dispute resolution procedures in Section XX (Dispute Resolution). If the billing agency prevails in the dispute, within five (5) Days of the resolution of the dispute, UPCM shall pay the sums due (with accrued interest) to the billing agency in the manner described in Paragraph 76. If UPCM prevails concerning any aspect of the contested costs, UPCM shall pay that portion of the costs (plus associated accrued Interest) for which it did not prevail to the billing agency in the manner described in Paragraph 76. UPCM shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XX (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding UPCM's obligation to reimburse the Federal Environmental Agencies for their Future Response Costs or Future Assessment Costs.

XIX. DISBURSEMENT OF SPECIAL ACCOUNT FUNDS

79. Subject to the terms and conditions set forth in this Section, within thirty days (30) after the Effective Date, EPA shall deposit six million dollars (\$6,000,000) of the ASARCO Settlement Funds into the Richardson Flat Disbursement Account and shall make such funds plus accrued Interest accrued on such funds from the date of the establishment of the Richardson Flat Disbursement Account available for disbursement to UPCM as partial reimbursement for

performance of the Work under this Settlement Agreement. EPA shall disburse funds from the Richardson Flat Disbursement Account to UPCM in accordance with the procedures and milestones for phased disbursements set forth in this Section.

80. Timing, Amount, and Method of Disbursing Funds From the Richardson Flat Disbursement Account. Within sixty (60) Days after EPA's receipt of a Cost Summary and Certification, as described in Paragraph 81(b), or within sixty (60) Days after receipt of a revised or supplemented Cost Summary and Certification under Paragraph 81(c), if EPA has requested a revised or supplemented Cost Summary and Certification under Paragraph 81(c), and subject to the conditions set forth in this Section, EPA shall disburse the funds from the Richardson Flat Disbursement Account annually at the completion of a Work Milestone set forth in the Removal Action Work Plan until all the funds have been disbursed hereunder or all Work has been completed, whichever first occurs. The amount of each annual disbursement shall be 75% of the amount set forth in the EPA approved Cost Summary and Certification not to exceed \$1,000,000. EPA shall disburse funds from the Richardson Flat Disbursement Account EPA to UPCM in accordance with payment instructions provided by UPCM in its Cost Summary and Certification.

81. Requests for Disbursements of Special Accounts Funds.

a. Within sixty (60) Days after issuance of EPA's written confirmation that a Work Milestone has been satisfactorily completed, UPCM shall submit to EPA a Cost Summary and Certification, as described in Paragraph 81 (b), covering the Work performed pursuant to this Settlement Agreement up to the date of completion of that Work Milestone. UPCM shall not include in any submission costs included in a previous Cost Summary and Certification following completion of an earlier Work Milestone if those costs have been previously sought or reimbursed pursuant to Paragraph 80.

b. Each Cost Summary and Certification shall include a complete and accurate written summary and certification of the necessary costs incurred and paid by UPCM for the Work covered by the particular submission, excluding costs not eligible for disbursement under Paragraph 81(d) (Costs Excluded from Disbursement). Each Cost Summary and Certification shall contain the following statement signed by the chief financial officer (or equivalent) of UPCM or an independent certified public accountant:

To the best of my knowledge, after thorough investigation and review of UPCM's documentation of costs incurred and paid for the Work Milestone performed pursuant to this Settlement Agreement, I certify that the information contained in or accompanying this submission is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

The chief financial officer or independent certified public accountant shall also provide EPA a list of the documents that he or she reviewed in support of the Cost Summary and Certification. Upon request by EPA, UPCM shall submit to EPA any additional information that EPA deems necessary for its review and approval of the Cost Summary and Certification.

c. If EPA finds that the Cost Summary and Certification includes a mathematical error, includes costs excluded under Paragraph 81(d)(Costs Excluded from Disbursement) or includes costs that are inadequately documented, it will notify UPCM and provide it an opportunity to cure the deficiency by submitting a revised or supplemented Cost Summary and Certification. If UPCM fails to cure the deficiency within sixty (60) Days after being notified of, and given the opportunity to cure, the deficiency, EPA will recalculate UPCM's costs eligible for disbursement and disburse the corrected amount to UPCM in accordance with this Section. UPCM may dispute EPA's recalculation under this Paragraph pursuant to Section XX (Dispute Resolution). In no event shall UPCM be disbursed funds from the Richardson Flat Disbursement Account in excess of amounts properly documented in the Cost Summary and Certification accepted or recalculated by EPA pursuant to Paragraph 81(c).

d. Costs Excluded from Disbursement. The following costs are excluded from, and shall not be sought by UPCM for, disbursement from the Richardson Flat Disbursement Account: (a) response costs paid pursuant to Section XVIII (Payments for Response and Assessment Costs); (b) any other payments made by UPCM to EPA pursuant to this Settlement Agreement or any other administrative order, consent decree or settlement agreement, including, but not limited to, any interest or stipulated penalties paid pursuant to Section XXII (Stipulated Penalties); (c) attorneys' fees and costs, except for reasonable attorneys' fees and costs necessarily related to obtaining access or institutional controls as required by Section XII (Access and Institutional Controls); (d) costs of any response activities UPCM performs that are not required under, or approved by EPA pursuant to this Settlement Agreement; (e) costs related to UPCM's litigation, settlement, development of potential contribution claims, or identification of defendants; (f) internal costs of UPCM, including but not limited to, salaries, travel, or in-kind services, except for those costs that represent the work of employees of UPCM directly performing the Work; (g) any costs incurred by UPCM prior to the Effective Date; or (h) any costs incurred by UPCM pursuant to Section XX (Dispute Resolution).

82. Termination of Disbursements from the Special Account. EPA's obligation to disburse funds from the Richardson Flat Disbursement Account under this Settlement Agreement shall terminate upon EPA's determination that UPCM: (a) has knowingly submitted a materially false or misleading Cost Summary and Certification; (b) has submitted a materially inaccurate or incomplete Cost Summary and Certification, and has failed to correct the materially inaccurate or incomplete Cost Summary and Certification within sixty (60) Days after being notified of, and given the opportunity to cure, the deficiency; or (c) failed to submit a Cost Summary and Certification as required by Paragraph 81(a) within sixty (60) Days (or such longer period as EPA agrees) after being notified that EPA intends to terminate its obligation to make disbursements pursuant to this Section because of UPCM's failure to submit the Cost Summary and Certification as required by Paragraph 81(a) and (b). EPA's obligation to disburse funds from the Richardson Flat Disbursement Account shall also terminate if UPCM elects not to perform the Removal Action pursuant to Paragraph 104 or upon EPA's assumption of performance of any portion of the Work pursuant to Paragraph 108 (Work Takeover), when such assumption of performance of the Work is not challenged by UPCM or, if challenged, is upheld

under Section XX (Dispute Resolution). UPCM may dispute EPA's termination of special account disbursements under Section XX (Dispute Resolution).

83. Recapture of Special Account Disbursements. Upon discovery of a materially false or misleading submission after disbursement of funds to UPCM, EPA shall submit a bill to UPCM for those amounts disbursed from the Richardson Flat Disbursement Account, plus Interest on that amount from the date of disbursement of the funds by EPA to the date of repayment by UPCM. Within sixty (60) Days after receipt of EPA's bill, UPCM shall reimburse the EPA Hazardous Substance Superfund for the total amount billed. Payment shall be made in accordance with Paragraphs 76 (Instructions for Future Response Cost Payments). Upon receipt of payment, EPA may deposit all or any portion thereof in the Richardson Flat Special Account or the EPA Hazardous Substance Superfund. The determination of where to deposit or how to use the funds shall not be subject to challenge by UPCM pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum. UPCM may dispute EPA's determination as to recapture of funds pursuant to Section XX (Dispute Resolution).

84. Balance of Special Account Funds. After EPA issues its written notice of completion of the Work pursuant to this Settlement Agreement, and after EPA completes disbursement to UPCM in accordance with this Section, EPA may transfer funds remaining in the Richardson Flat Disbursement Account to the EPA Hazardous Substance Superfund. Any transfer of funds to the EPA Hazardous Substance Superfund shall not be subject to challenge by UPCM pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum.

XX. DISPUTE RESOLUTION

85. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes involving the Federal Environmental Agencies and UPCM arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

86. a. If UPCM objects to any EPA or BLM action taken or decision made with respect to UPCM's obligations pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA and BLM in writing of its objection(s) within thirty (30) Days following such action, unless the objection(s) has/have been resolved informally. The agency whose action is subject to dispute and UPCM shall have thirty (30) Days following the agencies' receipt of UPCM's written objection(s) to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of the agency whose action is subject to dispute.

b. Any agreement reached between EPA, BLM and UPCM pursuant to this Section shall be in writing and shall, upon signature of the affected Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the agency whose action is subject to

dispute and UPCM are unable to reach an agreement within the Negotiation Period, an EPA management official at the Assistant Regional Administrator level or higher will issue a written decision on the dispute to UPCM. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. No obligations under this Settlement Agreement shall be suspended by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, UPCM shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

87. a. If UPCM objects to any action taken or decision made with respect to UPCM's obligations pursuant to this Settlement Agreement by the Natural Resource Trustees, including billings for Future Assessment Costs, it shall notify the Natural Resource Trustees in writing of its objection(s) within thirty (30) Days following such action, unless the objection(s) has/have been resolved informally. The Natural Resource Trustees and UPCM shall have thirty (30) Days following receipt of UPCM's written objection(s) to resolve the dispute through formal negotiations. The Negotiation Period may be extended at the sole discretion of the Natural Resource Trustees.

b. Any agreement reached between the Natural Resource Trustees and UPCM pursuant to this Section shall be in writing and shall, upon signature of the affected parties, be incorporated into and become an enforceable part of this Settlement Agreement.

c. If the Natural Resource Trustees and UPCM are unable to reach an agreement within the Negotiation Period with respect to disputes other than those pertaining to billings for Future Assessment Costs, the DOI Authorized Official will issue a written decision with the concurrence of the State Lead Natural Resource Trustee on the dispute to UPCM. The DOI Authorized Official's decision shall be incorporated into and become an enforceable part of this Settlement Agreement.

d. If the Federal Trustees and UPCM are unable to reach an agreement within the Negotiation Period with respect to disputes pertaining to billings by the Federal Trustees for Future Assessment Costs, the DOI Authorized Official will issue a written decision on the dispute to UPCM. The DOI Authorized Official's decision shall be incorporated into and become an enforceable part of this Settlement Agreement.

e. If the State Natural Resource Trustee and UPCM are unable to reach an agreement within the Negotiation Period on any dispute pertaining to billings by the State Natural Resource Trustee for Future Assessment Costs, the State Lead Natural Resource Trustee will issue a written decision on the dispute to UPCM. The State Lead Natural Resource Trustee's decision shall be incorporated into and become an enforceable part of this Settlement Agreement.

f. No obligations under this Settlement Agreement shall be suspended by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as

provided by this Section, UPCM shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with the written decision, whichever occurs

88. The dispute resolution process set forth in Paragraph 89 below pertains to all disputes between EPA and BLM regarding all EE/CA and Removal Action activities affecting the Silver Maple Claims portion of OU3.

89. EPA and BLM will cooperate to the fullest extent possible to ensure that EE/CA activities and Removal Action activities on or affecting the Silver Maple Claims are performed and fully and completely implemented. In the event of a disagreement between EPA and BLM, these agencies agree to attempt to negotiate a mutually acceptable resolution of the issues to the fullest extent possible, as specified by the following provisions:

a. EPA and BLM have coordinated their respective CERCLA response authorities at the Silver Maple Claims portion of the Site. EPA plans to issue the action memorandum for OU3 under CERCLA authorities with the concurrence of BLM. If a dispute between EPA and BLM arises concerning any matter addressed under this Settlement Agreement, and the dispute cannot be resolved at the project manager/staff attorney level, the disputing party shall identify the dispute to the other party in writing. EPA and BLM shall have fourteen (14) Days to resolve the dispute informally if possible.

b. At the end of the fourteen (14) Day informal dispute period, if the dispute is not resolved, the disputing party shall again state the dispute in writing in a letter addressed to the BLM District Manager, and the Deputy Assistant Regional Administrator for Office of Enforcement, Compliance, and Environmental Justice (EPA Deputy ARA), EPA Region 8. The other party shall have seven (7) Days to respond to this dispute letter. The BLM District Manager and the EPA Deputy ARA shall then have fourteen (14) Days to resolve the dispute.

c. If, at the end of this fourteen (14) Day period, the dispute cannot be resolved, all dispute letters and responses shall be forwarded to the Assistant Regional Administrator for Office of Enforcement, Compliance, and Environmental Justice (EPA ARA), EPA Region 8, and the BLM State Director. The EPA ARA and BLM State Director shall consult concerning the dispute and shall attempt to issue a joint decision regarding the issue within fourteen (14) Days of receipt of the dispute letters. In the event the EPA ARA and BLM State Director are unable to issue a joint determination, the EPA ARA will issue a decision. The EPA ARA shall consider the BLM position in this matter in light of the BLM's responsibilities and authorities as the federal land management agency responsible for the management and stewardship of the Silver Maple Claims and the BLM's CERCLA response action authorities with regard to the Silver Maple Claims.

d. If unsatisfied with the decision of the EPA ARA, the BLM may initiate consultation with the responsible Assistant Section Chief, Environmental Enforcement Section, U.S. Department of Justice, regarding the EPA ARA decision. The EPA ARA will participate in that

consultation process and consider the results of that consultation before making a final decision that will represent the final remedial action decision. Any final decision reached pursuant to this Paragraph 89 shall not be subject to judicial review by any Party, including EPA and BLM. The time periods listed herein may be increased or decreased by mutual agreement of EPA and BLM. During the pendency of any dispute between EPA and BLM that would impact a deliverable, the deadline for submittal of such deliverable will be tolled.

XXI. FORCE MAJEURE

90. UPCM agrees to perform all Work within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as any event arising from causes beyond the control of UPCM, or of any entity controlled by UPCM, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite UPCM's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

91. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, UPCM shall notify EPA verbally within forty-eight (48) hours following the time when UPCM first knew that the event might cause a delay. Within five (5) Days thereafter, UPCM shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; UPCM's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of UPCM, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude UPCM from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

92. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify UPCM in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify UPCM in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XXII. STIPULATED PENALTIES

93. UPCM shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 94 and 95 for its failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XXI (*Force Majeure*). "Compliance" by UPCM shall include completion of the Work in accordance with all applicable requirements of law, this Settlement Agreement, the EE/CA Work Plan, and any plans or other documents approved by EPA pursuant to this Settlement Agreement, and within the specified time schedules established by and approved under this Settlement Agreement.

94. Stipulated Penalty Amounts.

a. The following stipulated penalties shall accrue per Day against UPCM for failure to submit or timely submit any of the following: the EE report, the CA report, the Removal Action Work Plan or the final Removal Action report:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 250	1st through 14th Day
\$ 1,000	15th through 30th Day
\$ 37,500	31st Day and beyond

b. The following stipulated penalties shall accrue per Day against UPCM for failure to submit timely or adequate reports pursuant to the EE/CA Work Plan where an extension for the report has not been granted in writing prior to the due date by the EPA project coordinator:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 100	1 st through 14 th Day
\$ 700	15 th through 30 th Day
\$ 5,000	31 st Day and beyond

c. The following stipulated penalties shall accrue per Day against UPCM for failure to meet any other requirement of this Settlement Agreement or to submit timely or adequate quarterly progress reports:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 100	1 st through 14 th Day
\$ 500	15 th through 30 th Day
\$ 2,000	31 st Day and beyond

95. In the event that EPA assumes performance of a portion or all of the Work required of UPCM during performance of the EE/CA, pursuant to Paragraph 108 (Work Takeover), UPCM shall be liable for a stipulated penalty in the amount of \$50,000. In the event that EPA assumes

performance of a portion or all of the Work required by UPCM during performance of the Removal Action, pursuant to Paragraph 108 (Work Takeover) of Section XXIV (Reservation of Rights by Environmental Agencies), UPCM shall be liable for a stipulated penalty in the amount of \$100,000.

96. All penalties shall begin to accrue on the Day after the complete performance is due or the Day a violation occurs, and shall continue to accrue through the final Day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (i) with respect to a deficient submission under Sections IX or XI (EE/CA Work to be Performed; Performance of Removal), during the period, if any, beginning on the 31st Day after EPA's receipt of such submission until the date that EPA notifies UPCM of any deficiency; and (ii) with respect to a decision by the EPA management official designated in Paragraph 86 of Section XX (Dispute Resolution), during the period, if any, beginning on the 21st Day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

97. Following EPA's determination that UPCM has failed to comply with a requirement of this Settlement Agreement, EPA may give UPCM written notification of the failure and describe the noncompliance. EPA may send UPCM a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified UPCM of a violation.

98. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) Days following UPCM's receipt from EPA of a demand for payment of the penalties, unless UPCM invokes the dispute resolution procedures in accordance with Section XX (Dispute Resolution). All payments to EPA under this Section shall indicate that the payment is for stipulated penalties; shall reference the EPA Region, the Site/Spill ID Number 08-94, the EPA Docket Number for this Settlement Agreement, the name and address of the party making payment; shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substance Superfund"; and shall be mailed to:

Regular mail:

Mellon Bank
EPA Region 8
Attn: Superfund Accounting
Post Office Box 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail:

Mellon Bank
3 Mellon Bank Center
ROOM#153-2713
Pittsburgh, Pennsylvania 15259

or other such address as EPA may designate in writing, or by wire transfer to:

ABA=021030004
TREAS NYC/CTR/
BNF=/AC-68011008

Wire transfers must be sent to the Federal Reserve Bank in New York.

Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to:

U.S. EPA Region 8 Finance Program Manager, TMS-FMP
1595 Wynkoop Street
Denver, Colorado 80202

and to:

Maureen O'Reilly
Superfund Enforcement, ENF-RC
U.S. EPA Region 8
8ENF-RC
1595 Wynkoop Street
Denver, CO 80202

99. At the time of payment, UPCM shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

100. The payment of penalties shall not alter in any way UPCM's obligation to complete performance of the Work required under this Settlement Agreement.

101. Subject to Paragraph 104, penalties shall continue to accrue as provided in Paragraph 96 during any dispute resolution period, but need not be paid until fifteen (15) Days after the dispute is resolved by agreement or by receipt of EPA's decision.

102. If UPCM fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. UPCM shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 98.

103. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of UPCM's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 108 (Work Takeover). Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

104. Penalty Exception. Penalties shall apply, as set forth in this Section, in all circumstances related to the EE/CA and the Removal Action with the following specific exception. Within thirty (30) Days following issuance of the Action Memorandum and notwithstanding any other provision contained in this Settlement Agreement, UPCM may decide not to implement the Removal Action. Notwithstanding the foregoing, this Settlement Agreement shall remain in full force and effect. In the event UPCM decides not to implement the Removal Action, EPA may choose, in its sole discretion, to amend the Action Memorandum and UPCM shall have thirty (30) Days following the amendment to decide whether to implement the Removal Action as set forth in the amended Action Memorandum. Alternatively, EPA may (i) bring a claim in federal district court to obtain an injunction for performance of the Removal Action; (ii) issue a unilateral administrative order pursuant to Section 106(a) of CERCLA, 42 U.S.C. §9606(a), against UPCM and seek judicial enforcement; or (iii) perform the Removal Action and seek cost recovery against UPCM. If UPCM decides not to implement the Removal Action pursuant to this Paragraph it shall not be subject to stipulated penalties or statutory penalties for non-performance of the Removal Action unless and until the federal district court issues a final non-appealable order enforcing EPA's injunctive claim or the unilateral administrative order, or directing UPCM to pay the response costs of the Removal Action. Any stipulated or statutory penalties assessed following resolution by the federal district court under this Paragraph shall not be retroactive, but may be assessed to address future or continuing failures to comply with the requirements of this Settlement Agreement as specified in Section XXII.

XXIII. COVENANT NOT TO SUE BY ENVIRONMENTAL AGENCIES

105. a. Federal Environmental Agencies

i. In consideration of the actions that will be performed and the payments that will be made by UPCM under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA and BLM covenant not to sue or to take administrative action against UPCM pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. These covenant not to sue shall take effect upon the Effective Date and are conditioned upon UPCM's complete and satisfactory performance of all of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XVIII. These covenants not to sue (and all reservations thereto in this Settlement Agreement) shall also apply to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and not to the extent that the alleged liability arose independently of the alleged liability of UPCM. These covenants not to sue extend only to UPCM and to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and do not extend to any other person.

ii. In consideration of the actions that will be performed and the payments that will be made by UPCM under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, the Federal Trustees covenant not to sue or to take administrative action against UPCM pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Natural Resource Injury Assessment and Restoration Alternatives Analysis and Future Assessment Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon UPCM's complete and satisfactory performance of all of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Assessment Costs pursuant to Section XVIII. These covenants not to sue (and all reservations thereto in this Settlement Agreement) shall also apply to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and not to the extent that the alleged liability arose independently of the alleged liability of UPCM. These covenants not to sue extend only to UPCM and to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and do not extend to any other person.

iii. EPA, BLM and FWS covenant not to sue or to take administrative action against UDPR pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the

Work, the Natural Resource Injury Assessment and Restoration Alternatives Analysis, Future Response Costs, and Future Assessment Costs.

b. State Natural Resource Trustee

i. In consideration of the actions that will be performed and the payments that will be made by UPCM under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, the State Natural Resource Trustee covenant not to sue or to take administrative action against UPCM pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Natural Resource Injury Assessment and Restoration Alternatives Analysis and Future Assessment Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon UPCM's complete and satisfactory performance of all of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Assessment Costs pursuant to Section XVIII. These covenants not to sue (and all reservations thereto in this Settlement Agreement) shall also apply to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and not to the extent that the alleged liability arose independently of the alleged liability of UPCM. These covenants not to sue extend only to UPCM and to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and do not extend to any other person.

XXIV. RESERVATIONS OF RIGHTS BY ENVIRONMENTAL AGENCIES

106. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of the Environmental Agencies or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent the Environmental Agencies from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring UPCM in the future to perform additional activities pursuant to CERCLA or any other applicable law.

107. The covenant not to sue set forth in Section XXIII above does not pertain to any matters other than those expressly identified therein. The Environmental Agencies reserve, and this Settlement Agreement is without prejudice to, all rights against UPCM with respect to all other matters, including, but not limited to:

a. claims based on a failure by UPCM to meet a requirement of this Settlement Agreement;

- b. liability for costs not included within the definition of Future Response Costs or Future Assessment Costs;
- c. liability for response costs incurred by, but not reimbursed to, the State;
- d. liability for performance of response actions other than the Work;
- e. criminal liability;
- f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments, excluding performance of the Natural Resource Injury Assessment and Restoration Alternatives Analyses and Future Assessment Costs paid to the Natural Resource Trustees pursuant to this Settlement Agreement;
- g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of OU2 or OU3; and
- h. claims based upon a failure to implement the Removal Action subsequent to a period of thirty (30) Days after EPA's issuance of the Action Memorandum except as provided in Paragraph 104 (Penalty Exception).

108. Work Takeover. In the event EPA determines that UPCM has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary (Work Takeover). EPA shall issue a written notice (Work Takeover Notice) to UPCM before a Work Takeover. Any Work Takeover Notice will specify the grounds upon which such notice was issued and will provide UPCM a period of ten (10) Days within which to remedy the circumstances. If, after expiration of the 10-Day notice period, UPCM has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the Work Takeover Notice, EPA may at any time thereafter assume performance of all or any portion of the Work as EPA determines necessary. EPA shall notify UPCM of a Work Takeover in writing. In the event, however, where an emergency situation or immediate threat to public health or welfare or the environment exists, EPA will not issue a Work Takeover Notice and may at any time assume performance of all or any portion of the Work as EPA determines necessary. UPCM may invoke the procedures set forth in Section XX (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA or BLM in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that UPCM shall pay pursuant to Section XVIII (Payment of Response Costs and Assessment Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXV. COVENANT NOT TO SUE BY UPCM

109. a. UPCM covenants not to sue and agrees not to assert any claims or causes of action against the Environmental Agencies, UDPR or their contractors or employees, with respect to the Work, Future Response Costs, Future Assessment Costs or this Settlement Agreement, including, but not limited to:

i. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

ii. any claim arising out of response actions at or in connection with OU2 or OU3, including any claim under the United States Constitution, the Utah Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

iii. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work, Future Response Costs, or Future Assessment Costs.

b. UPCM reserves and this Settlement Agreement is without prejudice to UPCM's right to challenge EPA's remedy selection in the event UPCM elects not to implement the Removal Action and EPA commences a judicial enforcement action.

110. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXVI. OTHER CLAIMS

111. By issuance of this Settlement Agreement, the Environmental Agencies assume no liability for injuries or damages to persons or property resulting from any acts or omissions of UPCM. No Environmental Agency shall be deemed a party to any contract entered into by UPCM or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

112. Except as expressly provided in Section XXIII (Covenant Not to Sue by Environmental Agencies) and Section XXV (Covenant Not to Sue by UPCM), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against UPCM or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42

U.S.C. §§ 9606 and 9607, or creates a cause of action on behalf of any person not a party to this Settlement Agreement.

113. No action or decision by EPA or any other Environmental Agency pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXVII. CONTRIBUTION

114. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that both UPCM and UDPR are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The contribution protection provisions of this Paragraph shall also apply to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and not to the extent that the alleged liability arose independently of the alleged liability of UPCM. The "matters addressed" in this Settlement Agreement are those matters relating to the Site, the Removal Action, the Work, the Natural Resource Injury Assessment and Restoration Alternatives Analyses, Future Response Costs, and Future Assessment Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which both UPCM and UDPR, as of the Effective Date, resolved their liability to the Federal Environmental Agencies for those matters relating to the Site, the Work, the Natural Resource Injury Assessment and Restoration Alternatives Analyses, Future Response Costs, and to the Natural Resource Trustees for Future Assessment Costs paid by UPCM to the Natural Resource Trustees. The contribution protection provisions of this Paragraph shall also apply to UPCM's officers, directors, employees, successors, and assigns, but only to the extent that the alleged liability of the officer, director, employee, successor, or assign is based on its status and in its capacity as an officer, director, employee, successor, or assign of UPCM, and not to the extent that the alleged liability arose independently of the alleged liability of UPCM.

c. Nothing in this Settlement Agreement precludes the Environmental Agencies or UPCM from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any person not a party to this Settlement Agreement. Nothing in this Settlement Agreement diminishes the right of EPA, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXVIII. INDEMNIFICATION

115. UPCM shall indemnify, save and hold harmless the Environmental Agencies, UDPR, their officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of UPCM, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, UPCM agrees to pay the Environmental Agencies and UDPR all costs they incur, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the Environmental Agencies based on negligent or other wrongful acts or omissions of UPCM, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. Neither the Environmental Agencies nor UDPR shall be held out as a party to any contract entered into by or on behalf of UPCM in carrying out activities pursuant to this Settlement Agreement. Neither UPCM nor any of its contractors shall be considered an agent of any Environmental Agency or UDPR.

116. The appropriate Environmental Agency or UDPR shall give UPCM notice of any claim for which it plans to seek indemnification pursuant to this Section and shall consult with UPCM prior to settling such claim.

117. UPCM waives all claims against the Environmental Agencies and UDPR for damages or reimbursement or for set-off of any payments made or to be made to any Environmental Agency or UDPR arising from or on account of any contract, agreement, or arrangement between UPCM and any person for performance of Work on or relating to OU2 and OU3, including, but not limited to, claims on account of construction delays. In addition, UPCM shall indemnify and hold harmless the Environmental Agencies and UDPR with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between UPCM and any person for performance of Work on or relating to OU 2 or OU3, including, but not limited to, claims on account of construction delays.

XXIX. INSURANCE

118. At least thirty (30) Days prior to commencing any on-Site work under this Settlement Agreement, UPCM shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one million dollars, combined single limit, naming EPA and UDPR as an additional insureds. Within the same time period, UPCM shall provide EPA and UDPR with certificates of such insurance and a copy of each insurance policy. UPCM shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, UPCM shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of UPCM in furtherance of this

Settlement Agreement. If UPCM demonstrates by evidence satisfactory to EPA that any of its contractors or subcontractors maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then UPCM need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXX. FINANCIAL ASSURANCE

119. a. Within sixty (60) Days following the Effective Date, UPCM shall establish and maintain financial security for the benefit of EPA for the performance of the EE/CA for OU2 and OU3 in the amount of \$300,000.

b. EPA anticipates that the Removal Action for OU2 and OU3 will be implemented in sequenced phases over a period of years with potentially significant periods of time between the first and last phase. Typically, each phase will be completed within a construction season but there may be instances where a phase will extend into the succeeding year. Financial assurance for the OU2 and OU3 Removal Action shall be provided on a phased basis. Within sixty (60) Days following EPA's issuance of the Action Memorandum, UPCM shall establish and maintain financial security for the benefit of EPA for the performance of the first sequenced phase of the Removal Action. Thereafter, UPCM shall establish and maintain financial security for the benefit of EPA for the performance of each subsequent phase of the Removal Action prior to commencement of each such phase. The amount of financial security to be established and maintained by UPCM for each phase shall be based upon the cost of implementing the tasks set forth in the Removal Action Work Plans for such phase.

c. The financial security shall be in one or more of the following forms, in order to secure the full and final completion of Work (provided, however, UPCM may amend any of the letters of credit it previously provided to EPA as financial security under the Consent Decree for OU1 or the RI/FS AOC for OU2) :

- i. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- ii. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA; or
- iii. a trust fund administered by a trustee acceptable in all respects to EPA.

UPCM shall provide a copy of its financial security mechanism, and any accompanying transmittal letter(s) to:

Superfund Financial Analyst, 8ENF-RC
Superfund Technical Enforcement Program
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

120. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion and follow: (i) the model draft letter of credit dated December 1, 2004, see <http://www.epa.gov/compliance/resources/policies/cleanup/suprefund/fa-credit-mod.pfd>; (ii) the model payment surety bond dated July 1, 2005, see <http://www.epa.gov/compliance/resources/policies/cleanup/suprefund/fa-surety-paybond-mod.pfd>; or (iii) the trust fund model dated September 1, 2006, see <http://www.epa.gov/compliance/resources/policies/cleanup/suprefund/fa-trust-mod.pfd>. If UPCM elects to amend its existing letter(s) of credit, it will provide EPA with a draft copy in advance for EPA's review and approval before issuance of the amended letter of credit. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, UPCM shall, within sixty (60) Days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 119 above. If EPA notifies UPCM that the anticipated cost of completing any Work as set forth in Paragraph 119, is more than originally estimated, then, within sixty (60) Days of such notification, UPCM shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. UPCM's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

121. If, after the Effective Date, UPCM can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 119 of this Section, UPCM may, on any anniversary date of the Effective Date, reduce the amount of the financial security provided under this Section to the estimated cost of completing the remaining Work associated with such Work. UPCM shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, UPCM may seek dispute resolution pursuant to Section XX (Dispute Resolution). UPCM may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

122. UPCM may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, UPCM may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXXI. MODIFICATIONS

123. The affected Parties may agree to modifications to any plan, schedule, work plan or statement of work in writing or verbally. Any verbal modification will be promptly memorialized in writing. Any requirements of this Settlement Agreement relating to the Work may be modified in writing by mutual agreement of UPCM and EPA. Any other requirements may be modified in writing by mutual agreement of the affected Parties.

124. If UPCM seeks permission to deviate from any approved work plan or schedule, UPCM's project coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. UPCM may not proceed with the requested deviation until receiving oral or written approval from the EPA project coordinator pursuant to Paragraph 123.

125. No informal advice, guidance, suggestion, or comment by the EPA project coordinator or other representatives of the Environmental Agencies regarding reports, plans, specifications, schedules, or any other writing submitted by UPCM shall relieve UPCM of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXXII. NOTICE OF COMPLETION OF WORK

126. When EPA determines, after EPA's review of a final report that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including payment of Future Response Costs, or record retention, EPA will provide written notice to UPCM. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify UPCM, provide a list of the deficiencies, and require UPCM modify the EE/CA Work Plan if appropriate in order to correct such deficiencies. UPCM shall implement the modified and approved EE/CA Work Plan and shall submit a modified final report in accordance with the EPA notice. Failure by UPCM to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXXIII. ADMINISTRATIVE RECORD

127. EPA will determine the contents of the administrative record file. UPCM shall submit to EPA documents developed during the course of the EE/CA upon which selection of any response action will be based. Upon request of EPA, UPCM shall provide to EPA copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of EPA, UPCM shall additionally submit any previous studies conducted under state, local or other federal authorities relating to the EE/CA, and all communications between UPCM and state, local or other federal authorities concerning the EE/CA. A copy of the administrative record file shall be maintained in the

current information repository located at the Park City Library, 1255 Park Avenue, Park City, Utah.

XXXIV. INTEGRATION/APPENDICES/NOTICES

128. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

- Appendix A: Site Map
- Appendix B: Silver Maple Claims Map
- Appendix C: EE/CA Work Plan for OU2 and OU3
- Appendix D: NRDA Scope of Work for OU2 and OU3
- Appendix E: Major Deliverables

Unless otherwise provided in this Settlement Agreement, when written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses set forth below, unless those individuals or their successors give notice of a change to the other Parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided.

As to EPA:

Kathryn Hernandez
Remedial Project Manager
Superfund Remedial Section, 8EPR-RA
U.S. EPA, Region 8,
1595 Wynkoop Street
Denver, Colorado 80202
Phone: (303) 312-6101
Email: hernandez.kathryn@epa.gov

Andrea Madigan
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, Colorado 80202
Phone: (303) 312-6904
Email: madigan.andrea@epa.gov

As to UDEQ:

Mo Slam
UDEQ Project Manager
DERR P.O. Box 144840
Salt Lake City, Utah 84114-4840
Phone: (801) 536-4179
Email: mislam@utah.gov

Sandra K. Allen
Assistant Attorney General
P.O. Box 140873
Salt Lake City, Utah 84114-0873
Phone: (801) 536-4122
Email: skallen@utah.gov

As to UDPR

Heather B. Shilton
Assistant Attorney General
Natural Resources Division
1594 West North Temple, #300
Salt Lake City, UT 84116
Phone: (801) 538-7227
Email: heathershilton@utah.gov

As to the State Natural Resource Trustee

Brad T Johnson
State Natural Resource Lead Trustee
195 North 1950 West
4th Floor
P.O. Box 144810
Salt Lake City, UT 84114-4810
Phone: (801) 536-4402
Email: btjohnson@utah.gov

Sandra K. Allen
Assistant Attorney General
P.O. Box 140873
Salt Lake City, Utah 84114-0873
Phone: (801) 536-4122
Email: skallen@utah.gov

Mo Slam
State Trustee Technical Advisor
For Richardson Flat OU2 & 3
DERR P.O. Box 144840
Salt Lake City, Utah 84114-4840
Phone: (801) 536-4179
Email: mslam@utah.gov

Kent Sorenson
State Trustee Technical Advisor
For Richardson Flat OU2 & 3
Habitat Restoration Biologist
DWR-NRO
515 East 5300 South
Ogden, UT 84401
Phone: (801) 643-8342
Email: kentsorenson@utah.gov

As to BLM or FWS:

Casey S. Padgett
Branch of Environmental Compliance and Response
Office of the Solicitor, Department of the Interior
1849 C Street, N.W., Mail Stop 5530
Washington, D.C. 20240
Phone: (202) 208-4125
Email: casey.padgett@sol.doi.gov

Dana Jacobsen
Office of the Solicitor, Department of the Interior
755 Parfet, Suite 151
Lakewood, CO 80215
Phone: (303) 231-5353, ext 336
Email: dana.jacobsen@sol.doi.gov

Trent Duncan
BLM Utah State Office
440 West 200 South,
Suite 500
Salt Lake City, UT 84101
Phone: (801) 539-4088
Email: tduncan@blm.gov

John Isanhart
U.S. Fish and Wildlife Service Region 6
Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119
Phone: (801) 975-3330
Email: John_Isanhart@fws.gov

Chris Cline
U.S. Fish and Wildlife Service Region 6
Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119
Phone: (801) 975-3330
Email: Chris_Cline@fws.gov

As to UPCM:

Kerry C. Gee
Vice President
United Park City Mines Co.
P.O. Box 1450
Park City Utah 84060
Phone: (435) 333-6601
Email: kcgee@unitedpark.com

Kevin Murray
Holland & Hart LLP
222 South Main Street, Suite 2200
Salt Lake City, UT 84101
Phone: (801) 799-5919
Email: krmurray@hollandhart.com

XXXV. EFFECTIVE DATE

129. This Settlement Agreement shall be effective the Day upon which it has been fully executed by all Parties.

The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the Party they represent to this document.

Agreed this ____ Day of _____, 2013.

For UPCM:

By: _____

Title: _____

The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the Party they represent to this document.

Agreed this ____ Day of _____, 2013.

Utah Department of Environmental Quality
BY:

Amanda Smith, Executive Director
Utah Department of Environmental Quality

State of Utah Natural Resource Trustee
BY:

Brad T Johnson, Deputy Director
Utah Department of Environmental Quality
State of Utah Natural Resource Lead Trustee

BY:

Mike Styler, Executive Director
Utah Department of Natural Resources
State of Utah Natural Resource Co-Trustee

The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the Party they represent to this document.

Agreed this ____ Day of _____, 2013.

Utah Division of Parks and Recreation

BY:

Title

It is so ORDERED AND AGREED:

BY:

DATE: _____

Laura B. Brown
Associate Solicitor, Division of Land and Water Resources
Office of the Solicitor, Department of the Interior
(on behalf of the Bureau of Land Management)

BY:

DATE: _____

Noreen Walsh
Regional Director, Mountain-Prairie Region
(on behalf of the U.S. Fish and Wildlife Service)

It is so ORDERED AND AGREED:

BY:

DATE: _____
Andrea Madigan, Supervisory Attorney
Legal Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

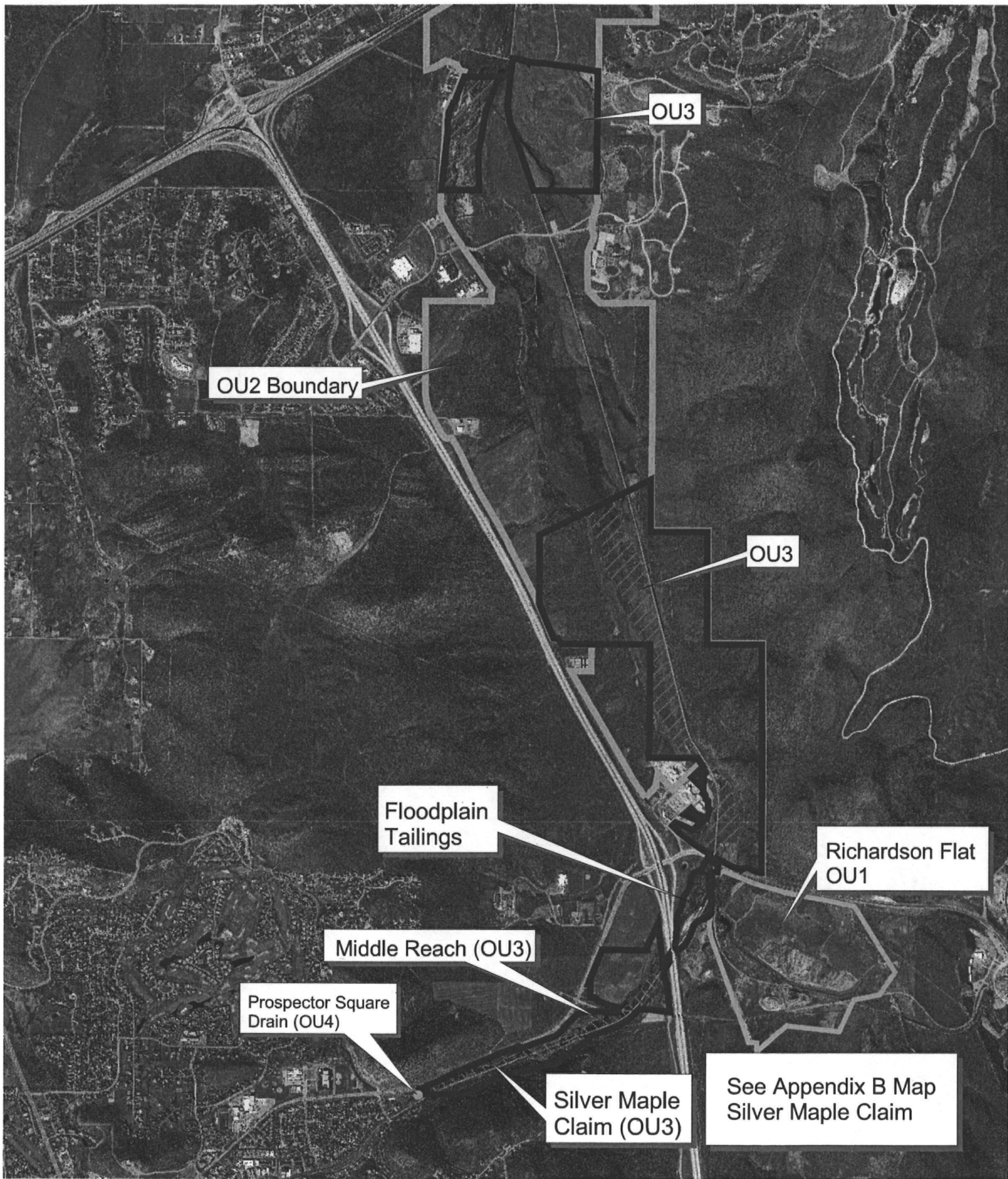
BY:

DATE: _____
Kelcey Land, Director
RCRA & CERCLA Technical Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

BY:

DATE: _____
Bill Murray, Director
Superfund Remedial Response Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

EFFECTIVE DATE: _____



- Prospector Square Drain (OU4)
- ▬ LSC-MR (OU3) Boundary
- ▬ LSC Boundary (OU2)
- ▬ Richardson Flat (OU1) Study Area
- ▨ LSC OU3 Tailings
- ▨ Middle Reach OU3 Tailings

0 0.4 0.8 1.2 1.6 2 Miles

Appendix A

Map Date
02-24-2012



BLM Silver Maple Parcel



SILVER MAPLE CLAIM
APPENDIX B

APPENDIX C

**ENGINEERING EVALUATION/COST ANALYSIS
WORK PLAN**

**Richardson Flat Tailings Site
Operable Units 2 and 3
Summit County, Utah**

SITE ID: UT980952840

November 2013

Prepared for:

**United Park City Mines Company
P.O. Box
Park City, Utah 84060**

Prepared by:

**Resource Environmental Management Consultants, Inc.
8138 South State Street, Ste. 2A
Midvale, Utah 84047
801-255-2626**

Contents

1.0	INTRODUCTION	1
1.1	BACKGROUND	2
1.1.1	OU2 Study Area	2
1.1.2	OU3 Study Area	2
1.2	WORK PLAN ORGANIZATION	3
2.0	PREVIOUS INVESTIGATIONS	4
2.1	SUMMARY OF DATA GAPS	4
2.1.1	Middle Reach (OU3)	5
2.1.2	Floodplain Tailings Reach (OU3)	5
2.1.3	State Route 248 North Reach (OU3)	6
2.1.4	P.C. West Reach (OU3)	6
2.1.5	P.C. East Reach (OU3)	7
2.1.6	Lower Silver Creek (OU2 and OU3)	7
2.2	DATA COLLECTED UPSTREAM OF OU2 AND OU3	ERROR! BOOKMARK NOT DEFINED.
2.2.1	Upstream Studies	Error! Bookmark not defined.
2.2.2	Upstream Data Gaps	7
3.0	SITE CHARACTERIZATION	8
3.1	PLANNING DOCUMENTS	8
3.1.1	Sampling and Analysis Plan	8
3.1.2	Health and Safety Plan	9
3.2	POTENTIALLY AFFECTED MEDIA	9
3.3	CONTAMINANTS OF CONCERN	9
3.4	SITE INVESTIGATIONS	9
3.4.1	Site Characterization Report	10
3.5	MEDIA TO BE INVESTIGATED IN THE EE/CA	11
3.5.1	Soil	11
3.5.2	Sediments	11
3.5.3	Surface Water	11
3.5.4	Shallow Groundwater	12
3.5.5	Groundwater	12
4.0	STREAMLINED RISK EVALUATION	12
5.0	ENGINEERING EVALUATION/COST ANALYSIS	13
5.1	REMOVAL ACTION OBJECTIVES	ERROR! BOOKMARK NOT DEFINED.
6.0	INJURY ASSESSMENT AND RESTORATION ALTERNATIVE ANALYSIS	15
7.0	PROPOSED EE/CA OUTLINE	15
8.0	SCHEDULE AND COMMUNITY INVOLVEMENT	16
8.1	EE/CA SCHEDULE	16
8.2	COMMUNITY INVOLVEMENT	16
9.0	REFERENCES	16

FIGURES

Figure 1-1 Site Location Map

Figure 1-2 Site Map

LIST OF ACRONYMS AND ABBREVIATIONS

ARAR	Applicable or Relevant and Appropriate Requirements
BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
COC	Contaminants of Concern
COPC	Chemicals of Potential Concern
DERR	State of Utah Department of Environmental Quality, Division of Environmental Response and Remediation
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EE/CA	Engineering Evaluation/ Cost Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FSP	Field Sampling Plan
FONSI	Finding of No Significant Impact
HASP	Health and Safety Plan
HEA	Habitat Equivalency Analysis
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
O&M	Operations and Maintenance
OU	Operable Unit
OU1	Operable Unit 1
OU2	Operable Unit 2
OU3	Operable Unit 3
OU4	Prospector Square, Operable Unit 4
PCMC	Park City Municipal Corporation
PRPs	Potentially Responsible Parties
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAA	Restoration Alternative Analysis
SAP	Sampling and Analysis Plan
Service	U.S. Fish and Wildlife Service
UDEQ	Utah Department of Environmental Quality
UDPR	State of Utah Division of Parks and Recreation
United Park	United Park City Mines Company
USCWG	Upper Silver Creek Watershed Stakeholders Group
USC	United States Code
USGS	United States Geological Survey
VCP	State of Utah Voluntary Cleanup Program

1.0 INTRODUCTION

This Work Plan is part of and incorporated into the Administrative Settlement Agreement and Order on Consent for EE/CA Investigation and Removal Action (Settlement Agreement) for OU2 and OU3 of the Richardson Flat Tailings Site in Park City, Utah. Unless otherwise expressly provided in this Work Plan, the terms used herein that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or such regulations. Whenever terms defined in the Settlement Agreement are used in this Work Plan, they shall have the same meaning assigned to them in the Settlement Agreement. The purpose of this Engineering Evaluation/Cost Assessment (EE/CA) Work Plan is to outline the general requirements to complete an investigation and preparation of an EE/CA. The work will be conducted by United Park City Mines Company (United Park) at Operable Unit 2 (OU2) and Operable Unit 3 (OU3). Figure 1-1 presents a Site Location map for OU2 and OU3.

United Park will conduct sequential phased work activities at OU2 and OU3 as described in this Work Plan, in coordination with the Environmental Protection Agency (EPA), and in accordance with procedures outlined by the Administrative Settlement Agreement and Order on Consent by and among United Park, EPA, Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (FWS), Utah Department of Environmental Quality (UDEQ), Utah Division of Parks and Recreation (UDPR) and the Utah Natural Resource Trustee dated concurrently herewith (the Settlement Agreement), the *National Oil and Hazardous Substance Pollution Contingency Plan* (NCP) (40 C.F.R. Part 300) as well as the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) and amendments (42 U.S.C. § 9606(a)). This Work Plan follows the recommendations spelled out in the EPA's *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA* (EPA540-R-93-057) and tasks outlined in this Work Plan will be organized to follow the *Guidance on Systematic Planning Using the Data Quality Objectives Process* (EPA QA/G-4), (EPA/240/B-06/001) and the EE/CA Approval Memorandum once it is submitted and approved.

The EE/CA will be prepared using site characterization data previously collected by EPA's contractors, the United States Geological Survey (USGS), BLM, the Upper Silver Creek Watershed Stakeholders Group, United Park, the State of Utah, and other relevant data sources identified in the Work Plan. Data gaps referenced in Section 2.1, below, will be addressed during the investigation phase of the EE/CA.

This Work Plan also allows for general data collection activities to complete a Draft Restoration Alternatives Analysis (RAA) as part of coordinated EPA, Department of Interior (DOI) and Utah Department of Environmental Quality (UDEQ) activities at OU2 and OU3. Any such data collection activity will be conducted in a manner similar to those efforts at OU1 and consistent with the *Scope of Work - United Park City Mines for Injury Assessment and Restoration*

Alternatives Analysis for the Richardson Flat Tailings Site Operable Unit 2 and 3 (Appendix D to the Settlement Agreement) and subject to the conditions and limitations identified in Paragraph 45 of the Settlement Agreement. Data collection activities shall be designed to include baseline data on species present/not present, quantification of existing resources and other data required for the Habitat Equivalency Analysis (HEA). Any such data collection activity by United Park will be in coordination with the applicable Natural Resources trustees (Trustees).

It is anticipated that the EE/CA and any RAA data collection activities will be conducted simultaneously.

1.1 Background

This Section describes the Study Area and provides a brief summary of Site conditions. EPA initially designated OU2 to address site impacted materials in the Silver Creek floodplain downstream of OU1 and U.S. Highway 40. These materials may exist along portions of the banks of Lower Silver Creek from U.S. Highway 40 on the southern end to Interstate 80 on the northern end. UPCM agreed to perform a remedial investigation and feasibility study pursuant to the RI/FS AOC for OU2 executed in September 2009. Thereafter, EPA organized the Site into four operable units.

A Site Map is presented in Figure 1-2.

1.1.1 OU2 Study Area

As defined in the Settlement Agreement, OU2 shall mean Lower Silver Creek, an area bounded by Highway 40 on its southern end and Interstate 80 on its northern end, ranging in width from 2,100 feet at the southern boundary to 3,800 feet near Pivotal Promontory Road, in Township 1 South Range 4 East, in Sections 10, 11, 15, 14, 22, 23, 26, 27, and 35 and approximately 500 feet in Section 2 of Township 2 South Range 4 East, Summit County, Utah and excluding any areas within OU3 (see Section 1.1.2). For data collection purposes, OU2 is comprised of Lower Silver Creek from U.S. Highway 40 (the northern boundary of OU3) downstream to Interstate 80 on its northern end. This area will be referred to as Lower Silver Creek. The remaining areas within the original OU2 boundary are addressed as OU3 (see Section 1.1.2). OU3 is depicted generally on Figure 1-1.

1.1.2 OU3 Study Area

As defined in the Settlement Agreement, OU3 shall mean an area beginning at the southeasterly boundary line of OU4 and then proceeding downstream to Highway 40 and including parcels

formerly addressed by the RI/FS for OU2 identified as all or a portion of Summit County Assessor parcel numbers SS-28-A-1-X, SS-27-B-X, SS-28-A-X, SS-56, SS-56-A-1, SS-56-UP-X, SS-56-A, SS-64-A, SS-64-1000-UP-X, SS-65-A-3-1, SS-65-A-5, SS-65-A-3, SS-65-1, SS-65-A-6, and SS-88, and excluding OU4 and any areas under the influence of or impacted by OU4. OU3 is depicted generally on Figure 1-1. For data collection purposes, OU3 is comprised of the following areas as presented on Figure 1-2:

- Middle Reach – The first area is commonly known as the Middle Reach of Silver Creek. This area encompasses the Silver Maple Claims from its upstream end at the Prospector Park downstream to U.S. Highway 40.
- Floodplain Tailings Reach (FPT Reach) – The second area extends from U.S. Highway 40 northward to State Route 248. A portion of this area is referred to as the “Floodplain Tailings” in the OU1 RI/FS (RMC, 2004a). This area was originally included in OU2.
- State Route 248 North Reach – The third area extends from State Route 248 northward approximately 9,000 feet through the southerly one third of the Lower Silver Creek floodplain. This area was originally included in OU2.
- P.C. West – The fourth area is located in the northern part of OU3 and is adjacent to the Snyderville Basin Water Reclamation Facility (sewage treatment facility) to the west. This area was originally included in OU2.
- P.C. East – The fifth area is located in the northern part of OU3 to the north of Promontory Road and is adjacent to a residential development (Pivotal Promontory, LLC has constructed a private club and second-home community) on its easterly boundary. This area was originally included in OU2.

1.2 Work Plan Organization

This Work Plan contains elements that allow the simultaneous collection of data for the EE/CA and the RAA, and is organized into separate sections as follows:

<u>Section</u>	<u>Topic</u>
Section 1	Introduction
Section 2	Previous Investigations
Section 3	Site Characterization
Section 4	Streamlined Risk Evaluation
Section 5	Engineering Evaluation/Cost Analysis
Section 6	Restoration Alternatives Analysis
Section 7	Proposed EE/CA Outline
Section 8	Schedule and Community Involvement
Section 9	References

2.0 PREVIOUS INVESTIGATIONS

The EE/CA will be prepared, in part, using extensive site characterization data previously collected by:

- Tetra Tech (for EPA in OU2 and OU3);
- United Park;
- USGS;
- BLM;
- Upper Silver Creek Watershed Stakeholders Group; and
- State of Utah.

Within 30 days after the Effective Date of the Settlement Agreement, United Park will provide the Environmental Agencies with a report summarizing data collection efforts associated with previous investigations. The data from previous investigations total approximately 1,142 data points. The existing data will be used to determine chemicals of potential concern (COPCs) and will assist in determining site wide contaminants of concern (COCs) after conducting screening against known risk benchmarks.

2.1 *Summary of Data Gaps*

As part of the preparation of this Work Plan, RMC compiled previously collected data and assessed data gaps in order to determine additional data needs to complete the following EE/CA tasks:

- Site Characterization;
- Streamlined Risk Evaluation;
- Engineering Evaluation; and
- Cost Analysis.

This Section describes data gaps identified during review of previous investigations and, based on these gaps, identifies the data collection needed to complete the EE/CA and RAA. The primary data source for each area is identified.

Sample locations and procedures will be described in the SAP for OU2 / OU3.

The data from any sampling activities previously conducted in OU2 or OU3 may be used for the purposes stated in this Work Plan provided sampling results have been previously reported to EPA and meet the data quality objectives of an approved Sampling and Analysis Plan and Quality Assurance Project Plan.

2.1.1 Middle Reach (OU3)

The Middle Reach contains approximately 6,700 feet of Silver Creek stream length from the boundary with Prospector Square (OU4) to U.S. Highway 40.

The 2,200 foot long uppermost portion of the Middle Reach has undergone investigation by the BLM (2005) and United Park. This section of the Middle Reach consists of land owned by the BLM, Park City Municipal Corporation and the State of Utah Division of Parks and Recreation (UDPR) (Rail Trail). Data provided by BLM and others will be used quantitatively if it meets Data Quality Objectives in the Quality Assurance Project Plan (QAPP), or qualitatively if the data do not meet these requirements. However, data gaps related to the characterization of any site impacted soils information used to estimate volumes of tailings, ecological receptors, and influence from OU4 may exist in this area. These media and target areas will be characterized with detail sufficient to complete the EE/CA and RAA.

There is not sufficient existing data for the remaining 4,500 feet of this reach to conduct the EE/CA and RAA. Data gaps include spatial distribution of tailings, sediment and soil characterization, ecological receptors, and localized interaction of groundwater/surface water within OU3. Therefore, data will be collected to address these gaps in quantities sufficient to complete the EE/CA and RAA. The data will be used to refine volume estimates for removal action alternatives, conduct streamlined risk evaluation for human health and ecological receptors, and collect data to prepare NRD assessments.

Surface and shallow ground water samples will be collected as part of the Site Characterization and will be used in determining removal action strategies.

2.1.2 Floodplain Tailings Reach (OU3)

The FPT Reach contains approximately 2,300 feet of Silver Creek stream length from U.S. Highway 40 to State Route 248.

As part of the OU1 RI/FS (RMC, 2004a) and Upper Silver Creek Watershed Stakeholders Group investigations, United Park installed and sampled a series of sixteen shallow monitoring wells in an area of exposed tailings in the FPT Reach.

Potential data gaps are similar to those identified in the Middle Reach. Data will be collected to complete the understanding of potential risks and to complete the RAA.

Surface and shallow ground water samples will be collected in the Floodplain Tailings area as part of the Site Characterization and will be used in determining removal action strategies.

2.1.3 State Route 248 North Reach (OU3)

Portions of the State Route 248 North Reach have undergone characterization by Tetra Tech (Tetra Tech, 2008a, 2008b and 2008c). With the exception of three parcels, data provided by Tetra Tech is generally sufficient to conduct the EE/CA and RAA in this area. These three parcels total approximately 60 acres and consist of parcels SS-65-A-5 and SS-65-A-6 and the power line (SS-65-1) separating them in the southeastern portion of this area.

Other data gaps in this area are limited to obtaining additional fill-in information on the spatial distribution of tailings and site impacted sediments in wetland areas located between the Tetra Tech transects. Additional data will be used to refine volume estimates for removal alternatives. Surface and subsurface soil and sediment data will be collected in areas where fluvial deposition of site impacted materials by Silver Creek has occurred.

Surface water sampling was conducted in this reach by Tetra Tech (Tetra Tech, 2008a, 2008b and 2008c) and the Upper Silver Creek Watershed Stakeholders Group (USCWG) (RMC, 2000a and 2000b).

Surface and shallow ground water samples will be collected as part of the Site Characterization and will be used in determining removal strategies.

2.1.4 P.C. West Reach (OU3)

The P.C. West Reach has undergone characterization by Tetra Tech (Tetra Tech, 2008a, 2008b and 2008c). Potential data gaps in this area include information on the spatial distribution of tailings and sediments in wetland areas sufficient to conduct the EE/CA and RAA. Surface and subsurface soil and sediment data will be collected where fluvial deposition of site impacted materials by Silver Creek has occurred as part of the Site Characterization. The data will be used for volumetric determinations necessary for the removal action alternatives and development of the RAA.

Surface and shallow ground water samples will be collected as part of the Site Characterization and will be used in determining removal action strategies.

2.1.5 P.C. East Reach (OU3)

The P.C. East Reach has undergone characterization by Tetra Tech (Tetra Tech, 2008a, 2008b and 2008c). Data provided by Tetra Tech is generally sufficient to conduct the EE/CA and RAA in this area. Potential data gaps in this area are limited to obtaining additional fill-in information on the spatial distribution of tailings and site impacted sediments in wetland areas. The data will be used to refine volumetric determinations for the removal action alternatives. Surface and subsurface soil and sediment data will be collected as part of the Site Characterization in these wetland areas.

Surface and shallow ground water samples will be collected as part of the Site Characterization and will be used in determining removal action strategies.

2.1.6 Lower Silver Creek (OU2 and OU3)

The Lower Silver Creek Reach has undergone characterization by Tetra Tech (Tetra Tech, 2008a, 2008b and 2008c). Data provided by Tetra Tech is generally sufficient, with the exception of waste volume determination, to conduct the EE/CA and RAA in this area. Potential data gaps in this area are limited to obtaining additional fill-in information on the spatial distribution of tailings and site impacted sediments in wetland areas. The data will be used to refine volumetric determinations for the removal alternatives. Surface and subsurface soil and sediment data will be collected as part of the Site Characterization in these wetland areas.

Surface and shallow ground water samples will be collected as part of the Site Characterization and will be used in determining removal action strategies.

2.1.7 OU4 Data Gaps

Data gaps in the OU4 area are discussed in the OU4 Work Plan dated December 2012, prepared for Park City Municipal Corporation (PCMC) by URS Corporation (URS). Since OU4 is upstream of OU2 and OU3, it is important that potential impacts from the Prospector reach of Silver Creek, Prospector Drain and the Prospector area are well understood so that they are addressed as part of the OU4 Administrative Order on Consent.

3.0 SITE CHARACTERIZATION

This section describes the investigations that will be conducted to:

- Determine the nature and extent of contamination at OU2 and OU3;
- Fill in data gaps identified in Section 2.1;
- Collect data in coordination with EPA and the Natural Resource Trustees to determine and quantify any actual or potential natural resource injuries at OU2 and OU3. Data evaluation will be used to assist with projects that will determine their capability to restore, rehabilitate, replace and/or acquire identified actual or potential injured natural resources and the services those resources provide to baseline conditions;
- Define where tailings may be impacting surface and groundwater;
- Provide the information to conduct streamlined risk evaluations to identify and characterize potentially unacceptable risks to human health and the environment; and
- Provide the information to develop and evaluate removal and restoration alternatives.

3.1 Planning Documents

United Park shall prepare planning documents to guide field activities. United Park shall submit a draft SAP, which shall consist of a Field Sampling Plan (FSP) and QAPP, and a Health and Safety Plan (HASP) within sixty (60) days after the Effective Date of the Settlement Agreement. Upon approval of the SAP in accordance with Section XIII of the Settlement Agreement, United Park shall implement the SAP.

3.1.1 Sampling and Analysis Plan

The SAP will comply with 40 C.F.R. 300.415(b)(4)(ii) and will include specific procedures for collecting, transporting and analyzing all samples required to complete the EE/CA. The SAP will consist of a FSP and QAPP. The FSP will include sample location theory based on the Triad approach (see Section 3.4), methodologies, analytical methods and Standard Operating Procedures (SOPs) for sample collection. The QAPP will be prepared consistent with "EPA Guidance for Quality Assurance Project Plans," EPA QA/G5 (EPA/600/R-98, Feb. 1998), and will include identification of the field and laboratory data quality objectives, quality assurance, sample validation, and quality control (QA/QC) protocols that will be used to achieve these objectives. The SAP will also provide for sampling measures to achieve the objectives outlined in Appendix D of the Settlement Agreement.

3.1.2 Health and Safety Plan

The HASP will be prepared in conformance with applicable Occupational Safety and Health Administration (OSHA) requirements, including but not limited to OSHA regulations in 29 CFR Part 1910 (54 Fed. Reg. 9294). The HASP will be prepared in accordance with EPA's Standard Operation Safety Guide, PUB 9285.1-03, PB 92-963414 (EPA, 1992). The HASP will describe health and safety protocols for OU2 and OU3 activities that ensure compliance with applicable regulations and provide for a safe work environment.

3.2 Potentially Affected Media

For purposes of this EE/CA Work Plan the potentially affected media at OU2 and OU3 include:

- Soils;
- Sediments;
- Surface water;
- Biota;
- Shallow groundwater; and
- Groundwater.

3.3 Chemicals of Potential Concern

Screening values and chemicals of potential concern (COPC) will be determined during the development of the Streamlined Risk Evaluation for OU2 and OU3. Due consideration will be given to information included in the Lower Silver Creek Final Field Sampling Plan prepared by Tetra Tech (Tetra Tech, 2008a) and other existing sources of relevant information.

3.4 Site Investigations

Site investigations in OU2 and OU3 will be conducted to fill data gaps, as they are related to deposition of site impacted materials, as identified in Section 2.1. The focus of these investigations will be to determine the nature and extent of metals impacts in the wetland and floodplain areas and complete the EE/CA and RAA. Site investigations will be conducted in accordance with the SAP described in Section 3.1.1, and will be coordinated with those site investigations required to perform the RAA in accordance with Appendix D of the Settlement Agreement.

Site investigations will fulfill data needs to complete the EE/CA and RAA in the wetland floodplain and channel of Silver Creek. Therefore, data considerations for stream diversions,

including logistics during removal and stream and wetland restoration after removal, will be addressed during investigations of OU2 and OU3.

Site investigations will include determining the depth of site impacted materials in order to support volume estimates for removal action strategies. Surface and groundwater will be characterized physically and chemically to determine the sources of flow and metals impacts to Silver Creek. Subsurface characterization of soil, sediments, and groundwater may require test pit excavation, drilling and/or direct push (e.g. geoprobe) operations, monitoring well/piezometer installation and geotechnical sampling.

Site investigations, where applicable, will be field-fit based on appropriate elements of the "Triad" approach described by EPA in the following documents:

- Improving Sampling, Analysis, and Data Management for Site Investigation and Cleanup (EPA, 2001);
- Best Management Practices for Site Assessment, Remediation, and Greener Cleanups (EPA, 2012a); and
- Triad Training for Practitioners (EPA, 2012b).

The Triad approach allows for the streamlined use of a three-pronged approach incorporating the following elements:

- Systematic Planning;
- Dynamic Work Plan; and
- Use of on-site analytic tools (e.g. field portable XRF for soil sampling).

All investigation work will be conducted in accordance with the planning documents described in Section 3.1. All analytical samples will be analyzed by a laboratory certified by the State of Utah.

3.4.1 Site Characterization Report

A Site Characterization Report will be prepared to summarize investigations of OU2 and OU3. The Site Characterization Report will:

- Summarize field investigation activities;
- Present a summary of data collected; and
- Present a conceptual site model.

Results of investigations in OU2 and OU3, as presented in the Site Characterization Report, will assist in formulating the EE/CA document.

3.5 *Media to be Investigated in the EE/CA*

This Section describes investigations and data evaluation for each specific media at OU2 and OU3.

3.5.1 Soil

Soil investigations will be conducted to determine the nature and extent of site impacted materials in the floodplain and stream channel. Soils will be investigated by collecting surface and at-depth samples to determine the vertical and horizontal extent of metals impacts. Sample locations will be identified in the SAP to address data gaps. Soil samples will be collected and evaluated in sufficient quantity and spatial distribution to support volume estimates for removal, disposal and restoration.

3.5.2 Sediments

Sediment investigations will be conducted to determine the nature and extent of metals impacts in the floodplain and wetland areas of OU2 and OU3. Sediments will be investigated by collecting surface and at-depth sediment samples to determine the vertical and horizontal extent of any metals impacts. Sample locations will be identified in the SAP to address data gaps identified during the review of existing data. Sediment samples and associated pore water will be collected and evaluated in sufficient quantity and spatial distribution to support volume estimates for removal, disposal and restoration.

3.5.3 Surface Water

Surface water investigations will be conducted locally to determine the nature and extent of metals impacts in OU2 and OU3 surface waters, potential sources of contamination and flow characteristics. Surface water will be investigated by collecting surface water quality samples and flow data in sufficient quantities to determine metals impacts and loading and support development of the conceptual site model. Data collected during surface water investigations will be used to characterize the source and flow characteristics of the Silver Creek floodplain and channel. The flow characteristics will be used for channel design during removal and restoration activities. Flow characteristic studies may include the use of dye and salt tracer studies.

3.5.4 Shallow Groundwater

For the purposes of this EE/CA, shallow groundwater is defined as water contained in the unconfined Silver Creek alluvial aquifer. Shallow groundwater investigations will be conducted locally to determine the nature and extent of metals impacts in OU2 and OU3 shallow groundwater and to characterize localized groundwater and surface water interactions (contaminant transport) and potential localized impacts to organisms associated in this zone. Shallow groundwater samples will be collected utilizing existing monitoring wells and/or piezometers where possible. Additional monitoring wells and/or piezometers will be located and installed as necessary and appropriate. Monitoring wells will be installed by a driller licensed by the State of Utah.

Monitoring well and/or piezometer water level data will be used to characterize subsurface flow in alluvial aquifers located within OU2 and OU3.

3.5.5 Groundwater

The OU1 RI (RMC, 2004a) included a regional hydrogeologic study that evaluated the hydrogeology and water quality for wells in the area of OU2 and OU3. This study concluded that the tailings located adjacent to Silver Creek were not impacting groundwater quality in the bedrock aquifer. This report will be evaluated to determine its relevance.

4.0 STREAMLINED RISK EVALUATION

Formal guidance for preparing a "streamlined risk evaluation" (SRE) has not been developed by EPA, although the term is listed in the Non Time Critical Removal Action guidance (USEPA, 1993). This document describes the SRE as intermediate in scope between a screen and a baseline risk assessment, providing enough information to justify a removal action and identify which exposures should be prevented. In practice, a SRE is generally an expansion of a conservative screening level risk assessment, with enough additional evaluation to support the DQOs and removal action decision making but still adhering to established risk assessment guidance (USEPA, 1997). Just what additional information and evaluation is needed will vary and is generally determined by the project risk assessors and managers. Examples of this additional information will be based on the conceptual site model (CSM) and may include more or different data collection, food chain or fate and transport modeling, exposure analysis, etc. In OU2 and OU3, a SRE will be conducted for this EE/CA. Given the ecosystem present in OU2 and OU3 and the level of work completed in the OU1 Risk Assessment, a detailed SRE is warranted. The detailed evaluation will consider existing screening levels, exposure parameters, toxicity reference values and data from the OU1 work and elsewhere, as well as new data collected during Site Characterization studies. SRE activities will be conducted in consultation

with the Environmental Agencies. The SRE will supplement the results of ecological and human health risk assessments conducted for OU1.

5.0 ENGINEERING EVALUATION/COST ANALYSIS

The EE/CA will present results of OU2 and OU3 investigations and will document the development and screening of removal action alternatives to address any unacceptable risks to human health or the environment associated with OU2 and OU3.

The EE/CA will identify a sequentially phased schedule of annual Work Milestones, subject to further refinement in the Removal Action Work Plan. Each Work Milestone will be defined so that it is possible to complete the Work Milestone within a construction season. The Removal Action Work Plan will also specify the approximate costs associated with each Work Milestone to facilitate identifying the financial assurance that must be posted to finance the immediately upcoming annual portion of the Removal Action prior to commencement of each such phase.

The general goals of the EE/CA are:

- Satisfy environmental review requirements for removal actions;
- Satisfy administrative record requirements for documentation of removal action selection; and
- Provide a framework for evaluating and selecting alternative technologies.

Applicable or Relevant and Appropriate Requirements (ARARs) will be developed and used to evaluate alternatives. A range of removal alternatives will be developed in the EE/CA, and these alternatives will be evaluated against the short- and long-term criteria of the NCP for effectiveness, implementability and cost. The EE/CA will provide a comparative analysis of the alternatives and will identify the removal action alternative which best satisfies the NCP criteria.

The EE/CA will be prepared in accordance with EPA's *Guidance on Conducting Non-Time Critical Removal Actions under CERCLA* (EPA540-R-93-057, August 1993 (EPA, 1993)). The EE/CA will be consistent with EPA's suggested outline (EPA, 1993) and will at a minimum include the following elements:

Executive Summary:

- Identification of the threat;
- Description of the RAOs; and
- Summary of the recommended action.

Site Characterization:

- Site description and background information;
- Description of previous investigations and site activities;
- Determination of screening levels for ecological and human health risks;
- Summary of the source, nature and extent of COCs in OU2 and OU3, if any;
- Presentation and review of XRF and laboratory data;
- Streamlined Risk Evaluation; and
- Development of Preliminary Remedial Goals (PRGs).

Treatability (if required)

- Treatability for tailings disposal options; and
- Treatability for use of tailings as a growth medium during revegetation.

Identification of RAOs:

- Determination of applicable or relevant and appropriate requirements (ARARs);
- Description of statutory limits on removal actions;
- Determination of the scope of the removal for OU2 and OU3;
- Determination of potential schedules for the removal at OU2 and OU3;
- Description of the planned removal activities.

Identification and Analysis of Removal Action Alternatives:

- Effectiveness;
- Implementability; and
- Cost.

Comparative Analysis of Removal Action Alternatives:

- Based on effectiveness, implementability and cost.

Recommended Removal Action Alternative:

- Description of the recommended removal action alternative and reasoning behind the recommendation.
- Conceptual outline of annual sequential Work Milestones related to the recommended removal action alternative to be refined in the Removal Action Work Plan.

A proposed outline for the EE/CA is presented in Section 7.0.

6.0 INJURY ASSESSMENT AND RESTORATION ALTERNATIVE ANALYSIS

Subject to the conditions and limitations of Paragraph 43 of the Settlement Agreement, the RAA will be prepared concurrently with development of the EE/CA. A Draft Injury Assessment and Restoration Alternatives Analysis will be submitted to the Trustees 60 days after the Final EE/CA is completed. The scope, process and schedule for the RAA are addressed in *Scope of Work - United Park City Mines for Injury Assessment and Restoration Alternatives Analysis for the Richardson Flat Tailings Site, Operable Unit 2 and 3* (Appendix D to the Settlement Agreement).

7.0 PROPOSED EE/CA OUTLINE

The Engineering Evaluation/Cost Analysis (EE/CA) may include the following sections:

Executive Summary

List of Acronyms and Abbreviations

Table of Contents

Section 1	Introduction and Site Background
Section 2	Site Characterization
	-- Previous removal actions (OU1)
	-- Analytical data
Section 3	Source, Nature and Extent of Contamination
Section 4	Streamlined Risk Evaluation
Section 5	Removal Action Scope, Goals and Objectives
	Identification of RAOs
	-- Statutory limits on removal actions
	-- Determination of removal action scope
	-- Determination of removal action schedule
	-- Planned removal action activities
Section 6	Treatability Studies (if required)
Section 7	Identification of Removal Action Alternatives
Section 8	Screening and Development of Removal Action Alternatives
Section 9	Analysis and Comparison of Removal Action Alternatives
Section 10	Comparative Analysis of Action Alternatives
Section 11	Recommended Removal Action Alternative
Section 12	Budget and Projected Schedule
Section 13	List of Preparers and Reviewers
Section 14	List of Agencies, Organizations and Parties Contacted
Section 14	References

An updated EE/CA outline will be submitted prior to or concurrently with the Site Characterization Report.

8.0 SCHEDULE AND COMMUNITY INVOLVEMENT

This section identifies schedule and community involvement elements.

8.1 EE/CA Schedule

The schedule for the performance of the Work to be conducted under this Work Plan is set forth in Appendix E to the Settlement Agreement.

8.2 Community Involvement

Consistent with the requirements of the NCP, EPA will develop and implement community relations activities for OU2 and OU3. United Park shall, as requested by EPA, assist EPA by providing information regarding the Site and/or OU2 and OU3 history, participating in public meetings, developing graphics, placing newspaper ads developed by EPA, or distributing fact sheets developed by EPA.

9.0 REFERENCES

Agra Earth and Environmental (Agra), Inc., 2000, Site Inspection Analytical Results Report, Marsac Mill, Park City, Summit County, Utah. Consultant's report prepared for Park City Municipal Corporation.

Argonne National laboratory, Applied Geosciences and Environmental Management Section, Environmental Research Division, (Argonne), 2003, The QuickSite Investigation for the Upper Silver Creek Watershed, Utah; Regional Analysis and Recommendations.

Brooks, L.E., Mason, J.E., and D.D. Susong., 1998, Hydrology and Snowmelt Simulation of the Snyderville Basin, Park City, and Adjacent Areas, Summit County, Utah: U.S. Geological Survey, Water-Resources Investigation Report.

Dames and Moore, 1975, Report Of Groundwater and Foundation Investigation Northeastern Portion of Prospector Square Development Site, Park City, Utah for Prospector Square Development Company

Dynamac Corporation, 2003, Final Silver Maple Wetland Functional Assessment
Giddings, E.M., Hornberger, M.I., and Hadley, H.K., 2001, Trace metal concentrations in sediment and water and health of aquatic macroinvertebrate communities of streams near Park City, Summit County, Utah: U.S. Geological Survey Water- Resources Investigations Report 01-4213.

Kimball, B.A., Johnson, K.K., Runkel, R.L., and Steiger, J.I., 2004, Quantification of metal loading to Silver Creek through the Silver Maple Claims area, Park City, Utah, May 2002: U.S. Geological Survey Water-Resources Investigations Report 03-4296

Kimball, B.A., Runkel, R.L., and Walton-Day, K., 2005, Principal Locations of Metal Loading from Floodplain Tailings, Lower Silver Creek, Utah, April 2004: U.S. Geological Survey Scientific Investigations Report.

Kolm, Kenneth E.; Yan, Eugene, 2005, Groundwater Flow Modeling for Prospector Square and Silver Maple Claims Tailings Sites, Park City, Utah

Mason, J.L., 1988, Hydrology of the Prospector Square Area, Summit County, Utah, United States Geological Survey, Water Resources Investigation Report 88-4156.

Michael Baker Jr., Inc./ Psomas (Baker et al), 2001, Silver Creek Total Maximum Daily Load For Dissolved Zinc And Cadmium, Prepared For: Utah Division of Water Quality (UDWQ)

Montgomery Watson Harza Americas, Inc. (MWH), 2002, Hydrogeologic Review of Richardson Flat Tailings Site.

Resource Management Consultants, Inc. (RMC), 2000a, Analytical Results for Surface Water Monitoring Activities Conducted May 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed (RMC. 2000a);

Resource Management Consultants, Inc. (RMC), 2000b, Analytical Results for Surface Water Monitoring Activities Conducted September and November 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed.

Resource Management Consultants, Inc. (RMC), 2003, Ecological Sampling and Analysis Plan for the Determination of the Nature and Effects of Heavy Metals within Wetland areas at Richardson Flat.

Note: The following 2 documents in combination are referred to as the "OU1 RIFS":

Resource Management Consultants, Inc. (RMC), 2004a, Focused Remedial Investigation (RI) Report for Richardson Flat, Site ID Number: UT980952840.

Resource Management Consultants, Inc. (RMC), 2004b, Focused Feasibility Study Report (FS) for Richardson Flat, Site ID Number: UT980952840

Resource Management Consultants, Inc. (RMC), 2008, Remedial Action/Remedial Design Work Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

Resource Management Consultants, Inc. (RMC), 2009, Level II Riparian Survey, Lower Silver Creek

Resource Management Consultants, Inc. (RMC), 2010, Sampling and Analysis Plan, Remedial Activities, Lower Silver Creek operable Unit 2, Richardson Flat Tailings Site, Park City, UT, Site ID Number: UT980952840.

Syracuse Research Corporation (SRC), 2002, Screening Ecological Risk Assessment for Richardson Flat Tailings, Prepared for: US Environmental Protection Agency, Region 8.

Syracuse Research Corporation (SRC), 2003, Baseline Human Health Risk Assessment for Recreational Visitors at Richardson Flat Tailings, Prepared for: US Environmental Protection Agency, Region 8.

Tetra Tech, Inc., 2008a, Field Sampling Plan for Upper and Lower Silver Creek Summit County, Utah, Prepared for: US Environmental Protection Agency, Region 8

Tetra Tech, Inc., 2008b, Draft Lower Silver Creek Data Summary Report, Prepared for: US Environmental Protection Agency, Region 8

Tetra Tech, Inc. 2008c, Lower Silver Creek Wetland Delineation Park City, Utah, Prepared for: US Environmental Protection Agency, Region 8

Tetra Tech, Inc. 2008d, Draft Lower Silver Creek, Utah Reactive Transport Modeling under High Flow Conditions for Cadmium and Zinc, Prepared for: US Environmental Protection Agency, Region 8

United States Agency for Toxic Substances and Disease Registry (ATSDR), 1988, Silver Creek Mine Tailings Exposure Study.

United States Bureau of Land Management (BLM), 2003, Final Silver Maple Wetland Functional Assessment.

United States Bureau of Land Management (BLM), 2005, Removal Site Inspection Silver Maple Claims, Park City Utah, Prepared by National Science and Technology Center, Denver CO.

United States Environmental Protection Agency (EPA), 1988, Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, OSWER Directive # 9355.3-01.

United States Environmental Protection Agency (EPA), 1989, *Transport and Fate of Contaminants in the Subsurface*, Seminar Publication, EPA/625/4-89/019, Sept. 1989.

United States Environmental Protection Agency (EPA), 1990, Guidance for Data Useability in Risk Assessment, OSWER Directive #9285.7-05.

United States Environmental Protection Agency (EPA), 1992, Standard Operation Safety Guide (PUB 9285.1-03, PB 92-963414).

United States Environmental Protection Agency (EPA), 1993, Guidance on Conducting Non-Time Critical Removal Action Under CERCLA, EPA 540-R-93-057.

United States Environmental Protection Agency (EPA), 1998, Guidance for Quality Assurance Project Plans", EPA QA/G5 EPA/600/R98.

United States Environmental Protection Agency (EPA), 2005, Record of Decision, Richardson Flat Tailings Site.

United States Environmental Protection Agency (EPA), 2001, Improving Sampling, Analysis and Data Management for Site Investigation and Cleanup, EPA-542-F-01-030a.

United States Environmental Protection Agency (EPA), 2012a, Best Management Practices for Site Assessment, Remediation, and Greener Cleanups

United States Environmental Protection Agency (EPA), 2012b, Triad Training for Practitioners

United States Geological Survey (USGS), 1989, Administrative Report, Data-Collection Activities by the USGS in Support of Ground-Water Flow Modeling Being Conducted by the BLM Near the Prospector Square Tailings Site, Park City , Utah.

United States Geological Survey (USGS), 2001, Trace-Metal Concentrations in Sediment and Water and Health of Aquatic Macroinvertebrate Communities of Streams near Park City, Summit County, Utah, Water-Resources Investigations Report 01-4213.

United States Geological Survey (USGS), 2004, Quantification of Metal Loading to Silver Creek Through the Silver Maple Claims Area, Park City, Utah, May 2002, Water Resources Investigations Report 0.-4296.

United States Geological Survey (USGS), 2007, Principle Locations of Metal Loading from Flood-Plain Tailings, Lower Silver Creek, Utah, April 2004, Scientific Investigations Report 2007-5248.

Utah Department of Natural Resources (DNR) and the United States Geological Survey (USGS), 1986, Water Resources of the Park City Area, Utah with Emphasis on Groundwater; Technical Publication No. 85. W.F. Holmes, K.R. Thompson, and Michael Enright (published by DNR).

Utah Department of Environmental Quality – Division of Environmental Response and Remediation (DERR), 2001, Lower Silver Creek Innovative Assessment Work Plan, Utah Department of Environmental Quality Division of Environmental Response and Remediation.

Utah Department of Environmental Quality – Division of Environmental Response and Remediation (DERR), 2002, Innovative Assessment Analytical Results Report, Lower Silver Creek, Summit County, Utah, October.

Utah Department of Environmental Quality (UDEQ), 2004, News release, Silver Creek Fish Advisory.

APPENDIX D

SCOPE OF WORK – United Park City Mines Company

FOR

**INJURY ASSESSMENT AND RESTORATION ALTERNATIVES ANALYSIS FOR THE
RICHARDSON FLAT TAILINGS SITE, OPERABLE UNIT 2 and 3, PARK CITY,
UTAH**

Introduction and Objectives

This Statement of Work (SOW) is an attachment to the Administrative Settlement Agreement and Order on Consent for EE/CA Investigations and Removal Action (Settlement Agreement). United Park City Mines Company (UPCM or RESPONDENT herein) is a respondent to the Settlement Agreement. Capitalized terms used in this SOW shall have the meaning assigned to them in the Settlement Agreement, unless the term is defined in the SOW.

This SOW describes the work to be performed by RESPONDENT to fulfill the requirements of Section X of the Settlement Agreement by conducting a Natural Resource Injury Assessment and Restoration Alternatives Analysis ("Injury Assessment and Restoration Alternatives Analysis") for OU2 and OU3. RESPONDENT shall coordinate with the Natural Resource Trustees in performing this work. RESPONDENT shall provide all documents and responses required by this SOW to the Natural Resource Trustees, the Lead Administrative Trustee (LAT) and to the State Trustee's technical advisors identified in Section XXXIV of the Settlement Agreement. The Natural Resource Trustees have identified DOI as the LAT, to be represented by the Fish and Wildlife Service. Should the Natural Resource Trustees change the LAT, it shall notify the RESPONDENT of the change in designation. The Natural Resource Trustees intend to have the LAT provide coordinated comments to RESPONDENT regarding all activities and deliverables performed or prepared by the RESPONDENT.

All activities performed and deliverables prepared by RESPONDENT pursuant to this SOW shall be subject to the review, comment, and approval of the Natural Resource Trustees. The activities and deliverables specified in Tasks 1 - 6 of this SOW shall be used by RESPONDENT to prepare the Draft Injury Assessment and Restoration Alternatives Analysis required by Task 7. Thereafter, the Natural Resource Trustees will prepare the Final Injury Assessment and Restoration Alternatives Analysis.

In coordination with the authorities of the Trustees for Natural Resources as set forth in Subpart G of the National Contingency Plan, 40 C.F.R. Part 300, Subpart G, and as described in an Assessment Plan that is prepared by RESPONDENT, RESPONDENT shall cooperatively with the Natural Resource Trustees evaluate existing data for relevance and then collect data to determine and quantify potential injuries to natural resources resulting from the release, if any, of hazardous substances at or from OU2 and OU3. In consultation with the LAT and in coordination with the performance of the EE/CA Work Plan, RESPONDENT shall evaluate the need for and collect various data types which may include but are not limited to geological (e.g. soils, sediments), biological (e.g. vegetation, biota), surface water, ground water, and air samples and at analytical detection concentrations sufficient to determine potential injury to federal and state natural resources and their supporting ecosystems. RESPONDENT shall coordinate with the Natural Resource Trustees and EPA to ensure that the sampling required for the EE/CA and the Injury Assessment and Restoration Alternatives Analysis is integrated to the extent practicable. All work shall be technically and legally defensible and in full compliance with the National Contingency Plan (NCP) and Natural Resource Damage Assessment (NRDA) Regulations, 43 C.F.R. Part 11, Subparts C and E. The Natural Resource Trustees acknowledge that the procedures and tasks established and identified in this SOW are consistent with Subpart G of the NCP and the NRDA Regulations.

In accordance with 43 C.F.R. §11.82, RESPONDENT shall, in consultation with the Natural Resource Trustees, develop and evaluate a range of alternatives for the restoration, rehabilitation, replacement and/or acquisition of the equivalent of injured natural resources and the services those resources provide to baseline conditions (hereafter referred to as "restoration alternatives"). Such restoration alternatives will identify and evaluate opportunities for coordinating or integrating implementation of restoration with the preferred Removal Action alternative identified in the EE/CA for OU2 and OU-3. Restoration alternatives must be appropriate for NRDA restoration under the NRDA Regulations and must be described in sufficient detail to be analyzed under the National Environmental Policy Act, which analysis shall be prepared by the Federal Natural Resource Trustees. The Injury Assessment and Restoration Alternatives Analysis shall be consistent with the outline presented in Attachment A of this SOW. RESPONDENT will perform all necessary technical analyses, edit the documents, prepare graphics, and provide any other necessary technical products for distribution to and review by the Natural Resource Trustees.

Using the HEA methodology, the FWS estimated that implementation of the restoration plan by the RESPONDENT at Richardson Flat OU1 will result in excess restoration (DSAYs). The Natural Resource Trustees, in consultation with RESPONDENT, will evaluate how this excess restoration is applicable to natural resource restoration elsewhere in the Silver Creek Watershed (i.e., OU2 and OU3).

This SOW defines the specific tasks to be performed by RESPONDENT to develop its Draft Injury Assessment and Restoration Alternatives Analysis. RESPONDENT will work closely with the Natural Resource Trustees to develop the Injury Assessment and Restoration Alternatives Analysis for OU2 and OU3, and remain in close communication with representatives of the Natural Resource Trustees throughout the work period. Upon request, RESPONDENT shall submit all deliverables in electronic form to the LAT.

Project Description and Tasks

RESPONDENT will be responsible for completing the following tasks for OU2 and OU-3:

Task 1 - Coordinate Assessment Planning and Data Collection and Review with Natural Resource Trustees

RESPONDENT shall coordinate with the Natural Resource Trustees in developing an Assessment Plan that ensures the assessment is performed in a planned and systematic manner. The Assessment Plan shall be prepared by RESPONDENT in a manner consistent with the NRDA regulations, as generally described in 43 C.F.R. § 11.31 to 11.32, and the tasks listed in this SOW, and shall be structured in a manner that is in coordination with and consistent with the provisions of the EE/CA Work Plan for OU2 and OU3. Concurrent with the early development phase of the EE/CA sampling plan and in coordination with EPA, RESPONDENT shall communicate with the Natural Resource Trustees to discuss the approach and objectives of the Assessment Plan such that the Natural Resource Trustees can provide guidance to

RESPONDENT and evaluate the extent to which the EE/CA Work Plan and sampling and analysis plan will satisfy the data collection needs of the Assessment Plan.

RESPONDENT, cooperatively with the Natural Resource Trustees, shall evaluate existing data for relevance and then conduct data collection and interpretation activities to determine and quantify potential injuries resulting from the releases of hazardous substances to natural resources at or from OU2 and OU3. RESPONDENT shall coordinate with the Natural Resource Trustees on various data collection activities which may include but are not limited to collecting geological (e.g. soils, sediments), biological (e.g. vegetation, biota), surface water, ground water, and air samples. The Natural Resource Trustees shall timely review and comment on the sampling and analysis plan for the EE/CA Work Plan, all data collection methods, analytical procedures and results, quality assurance/quality control measures, and all other methods, procedures, or practices utilized to determine potential injury to, or loss of, federal and state natural resources and their supporting ecosystems, have been included. These data collection activities shall be coordinated or integrated with data collection activities conducted by RESPONDENT in preparing the EE/CA for OU2 and OU3 to the extent practicable.

Task 2- Assist Natural Resource Trustees with a Baseline Resources and Services Analysis

RESPONDENT shall assist the Natural Resource Trustees with preparing a "Baseline Services Analysis," consistent with the definition of the term "baseline" as defined in 43 C.F.R. Part 11, regarding resources and services within OU2 and OU3. The Baseline Services Analysis will later be used in preparing the Injury Assessment and Restoration Alternatives Analysis. During preparation of this analysis, RESPONDENT will regularly communicate and interact with the Natural Resource Trustees (via conference calls, meetings and/or the exchange of written material) as injury determination and quantification proceeds. This analysis will provide the basis for assessing potential natural resource injuries and service losses and evaluating the effects of the preferred Removal Action alternative identified in the EE/CA for OU2 and OU3 on such potential injuries and service losses.

Task 3 - Assist Natural Resource Trustees with Identification of Restoration Objectives and the Identification and Quantification of Injuries to Natural Resources

RESPONDENT shall assist the Natural Resource Trustees to identify restoration objectives for OU2 and OU3. RESPONDENT shall participate in meetings with the Natural Resource Trustees to identify criteria for selection of restoration alternatives that should be used to support development of potential primary and compensatory restoration alternatives as part of Task 5.

RESPONDENT will use readily available information which may include that identified in Attachment B to this SOW and, in coordination with the Natural Resource Trustees, will use existing data and data collected under Task 1 to identify and quantify potential injuries to natural resources, including injuries that may have already occurred as a result of the release of hazardous substances at or from OU2 and OU3 and injuries that would result from the preferred Removal Action alternative identified in the EE/CA for OU2 and OU3. RESPONDENT will assist the Natural Resource Trustees in developing an analysis of potential past injuries and potential injuries that may result from the preferred Removal Action alternative identified in the EE/CA for OU2 and OU3 to estimate appropriate compensation for lost services using the

Habitat Equivalency Analysis methodology and other economic or valuation methods, as appropriate. Such analysis shall be included in the Draft Injury Assessment and Restoration Alternatives Analysis.

Task 4 - Assist Natural Resource Trustees with Evaluation of Lost Human Use Services

In coordination with the Natural Resource Trustees, RESPONDENT shall assist the Natural Resource Trustees in an assessment of lost and/or diminished recreational uses that may have resulted from the release of hazardous substances at or from OU2 and OU3. This assessment will include, but shall not be limited to, reviewing existing information, assisting with the assessment of lost and/or diminished recreational use, and documenting and presenting determined human use losses, if any. Primary and compensatory restoration for lost recreational opportunities or human uses will be analyzed under Task 5 below. Such analysis shall be included in the Draft Injury Assessment and Restoration Alternatives Analysis.

Task 5 - Identification, Scaling and Costing of Primary and Compensatory Restoration Projects

Upon issuance of the Final EE/CA for OU2 and OU3, RESPONDENT shall, in coordination with the Natural Resource Trustees, identify potential restoration alternatives that can be coordinated with the preferred Removal Action alternative for OU2 and OU3 identified by the Final EE/CA. In coordination with the Natural Resource Trustees, RESPONDENT will, during the identification of potential restoration projects, develop preliminary estimates of project scale and costs and/or implement valuation approaches, all based on methods consistent with NRDA regulations. Restoration alternatives may include restoration for lost and/or diminished human use, if any, and ecological services. Such analysis shall be included in the Draft Injury Assessment and Restoration Alternatives Analysis.

Task 6 - Assist Natural Resource Trustees with Development of Maps and Graphics

In coordination with the Natural Resource Trustees, RESPONDENT shall support development of graphic data analysis and display products, maps and other graphics that visually illustrate the extent and severity of injury in the assessment area, link restoration and injury analyses, and/or otherwise support the assessment needs.

Task 7 - Prepare Draft and Final Injury Assessment and Restoration Alternatives Analysis

Based on the results of the activities and deliverables required under Tasks 2 through 6, RESPONDENT shall prepare and deliver to the Natural Resource Trustees a Draft Injury Assessment and Restoration Alternatives Analysis 60 days after the Final EE/CA is completed. The RESPONDENT shall assist the Natural Resource Trustees in finalizing the text of the Draft Injury Assessment and Restoration Alternatives Analysis. The report will generally follow the outline example provided in Attachment A to this SOW to ensure that all necessary components have been addressed. However, RESPONDENT and the Natural Resource Trustees recognize that the level of detail and specific categories indicated by subheadings in Attachment A may not be appropriate to the assessment of potential injury, and restoration alternatives analysis for OU2 and OU3. The Natural Resource Trustees shall complete a final version of the Injury Assessment and Restoration Alternatives Analysis and intend to provide it to EPA prior to the time EPA issues its Action Memorandum for OU2 and OU3.

Task 8- Meetings and other support

RESPONDENT will participate in meetings (with whatever personnel or representatives RESPONDENT deems appropriate) with the Natural Resource Trustees to facilitate development of the Injury Assessment and Restoration Alternatives Analysis. RESPONDENT should anticipate attending several meetings per year during the period of performance and expect to participate in conference calls each month with the Natural Resource Trustees (in addition to more frequent interaction with the primary contacts for the Natural Resource Trustees). The contacts for the Natural Resource Trustees are included in the AOC.

Schedule for Coordination Activities and Deliverables

The Natural Resource Trustees anticipate that aspects of several of the tasks should be coordinated and implemented prior to RESPONDENT's submission of a final EE/CA and issuance of the Action Memorandum for OU2 and OU3. Appendix E to the Settlement Agreement contains the projected schedule for the performance of the work to be conducted under this Scope of Work.

ATTACHMENT A

EXAMPLE INJURY ASSESSMENT AND RESTORATION ALTERNATIVES OUTLINE

(Note: To the extent applicable and appropriate, data and information may be incorporated into documentation by reference.)

**Title Page
Signature Page
Table of Contents
List of Tables
List of Figures
List of Appendices**

Summary

- 1. Introduction**
 - 1.1. Authority**
 - 1.2. Contents of This Document**
 - 1.3. Public Participation**
- 2. Purpose and Need for Restoration**
 - 2.1. Purposed and Need**
 - 2.2. Overview and History of OU2 and OU3**
 - 2.2.1. OU2 and OU3 Location and Description**
 - 2.2.2. OU2 and OU3 History**
 - 2.3. Resource Characteristics**
 - 2.3.1. Habitat**
 - 2.3.2. Surface Water**
 - 2.3.3. Groundwater**
 - 2.3.4. Fish and Wildlife**
 - 2.3.5. Human Use**
 - 2.4. Summary of Response Actions**
 - 2.5. Summary of Previous Investigations**
 - 2.6. Overview of Requirements**
 - 2.6.1. Injury Determination and Quantification**
 - 2.6.2. Damage Determination**
 - 2.6.3. Restoration Determination and Alternatives**

- 3. Injury Determination and Quantification
 - 3.1. Injury Assessment Strategy
 - 3.2. Injury Determination
 - 3.2.1. Contaminants of Concern
 - 3.2.2. Pathways of Contamination
 - 3.2.3. Testing and Sampling Methodology
 - 3.3. Injury Quantification
 - 3.3.1. Ecological Services at OU2 and OU3
 - 3.3.2. Ecological Services Evaluated/Not Evaluated
 - 3.3.3. Ecological Toxicity Benchmarks
 - 3.3.4. Estimating Loss of Aquatic Services
 - 3.3.4.1. Wetland Losses
 - 3.3.4.2. Stream Losses
 - 3.3.5. Estimating Loss of Terrestrial Services
 - 3.3.6. Estimating Loss of Human Uses
 - 3.4. Damage Determination
 - 3.4.1. Habitat Equivalency Analysis (HEA)
 - 3.4.1.1. Methodology
 - 3.4.1.2. Input Assumptions for OU2 and OU3
 - 3.4.1.3. OU2 and OU3 Features
 - 3.4.1.4. Assumptions
 - 3.4.1.4.1. Baseline
 - 3.4.1.4.2. Injury
 - 3.4.1.4.3. Natural Recovery
 - 3.4.1.4.4. Primary Restoration
 - 3.4.1.4.5. Compensatory Restoration
 - 3.4.1.5. HEA Results
 - 3.4.1.5.1. Debits
 - 3.4.1.5.2. Compensatory Restoration
 - 3.4.2. Human Use Analysis
 - 3.4.2.1. Methodology
 - 3.4.2.2. Input Assumptions for OU2 and OU3
 - 3.4.2.3. OU2 and OU3 Features

- 3.4.2.4. Assumptions
 - 3.4.2.4.1. Baseline Level of Recreational Use
 - 3.4.2.4.2. Current Level of Recreational Use
- 3.4.2.5. Economic Assessment Results
 - 3.4.2.5.1. Debits
 - 3.4.2.5.2. Compensatory Restoration
- 4. Restoration Determination and Alternatives
 - 4.1. Restoration Objective
 - 4.2. Restoration Selection Criteria
 - 4.3. Screening of Restoration Alternatives
 - 4.4. Scaling Restoration Alternatives
 - 4.5. Proposed Restoration Alternatives
 - 4.5.1. No Action
 - 4.5.2. Alternative A (Preferred Alternative)
 - 4.5.3. Alternative B
 - 4.5.4. Alternatives Considered but Dismissed
 - 4.5.5. Management
 - 4.5.6. Implementation
 - 4.5.7. Schedule
- 5. Environmental Consequences
 - 5.1. No Action
 - 5.1.1. Physical Environment
 - 5.1.2. Biological Environment
 - 5.1.3. Cultural and Human Environment
 - 5.2. Alternative A
 - 5.2.1. Physical Environment
 - 5.2.2. Biological Environment
 - 5.2.3. Cultural and Human Environment
 - 5.3. Alternative B
 - 5.3.1. Physical Environment
 - 5.3.2. Biological Environment
 - 5.3.3. Cultural and Human Environment
- 6. Impact Comparison Matrix

7. Monitoring Program and Performance Criteria
8. Preferred Alternative
9. Implementation
 - 9.1. Management
 - 9.2. Implementation
 - 9.3. Schedule
10. List of Preparers
11. List of Agencies, Organization, and Parties Consulted and/or Contacted
12. Literature Cited
13. Appendices

ATTACHMENT B

LIST OF LITERATURE TO BE USED TO SUPPORT ASSESSMENT AS APPLICABLE

A partial list of investigations includes:

- Agra Earth and Environmental (Agra), Inc. 2000. Site Inspection Analytical Results Report, Marsac Mill, Park City, Summit County, Utah. Consultant's report prepared for Park City Municipal Corporation.
- Ashland, F.X., Bishop, C.E., Lowe, M., and B.H. Mayes. 2001. The Geology of the Snyderville Basin, Western Summit County, Utah, and its relation to ground-water conditions, Water Resource Bulletin 28.
- Brooks, L.E., Mason, J.E., and D.D. Susong. 1998. Hydrology and Snowmelt Simulation of the Snyderville Basin, Park City, and Adjacent Areas, Summit County, Utah: U.S. Geological Survey, Water-Resources Investigation Report.
- Broomfield, C.C. and M.D. Crittenden. 1971. Geologic Map of the Park City East Quadrangle Summit and Wasatch Counties, USGS Map GQ-852.
- Bureau of Land Management (BLM). 2005. Removal Site Inspection, Silver Maple Claims. National Science and Technology Center. Denver, CO. April 25, 2005
- Dames and Moore. 1975. Report Of Groundwater and Foundation Investigation Northeastern Portion of Prospector Square Development Site, Park City, Utah for Prospector Square Development Company
- Dynamac Corporation. 2003. Final Silver Maple Wetland Functional Assessment
- Giddings, E.M., Hornberger, M.I., and H.K. Hadley. 2001. Trace metal concentrations in sediment and water and health of aquatic macroinvertebrate communities of streams near Park City, Summit County, Utah: U.S. Geological Survey Water- Resources Investigations Report 01-4213.
- Holmes, W.F., Thompson, K.R., and M. Ehrhart. 1986. Water resources of the Park City area, Utah, with emphasis on groundwater: Utah Department of Natural Resources Technical Publication 85.
- Kimball, B.A., Johnson, K.K., Runkel, R.L., and J.I. Steiger. 2004. Quantification of metal loading to Silver Creek through the Silver Maple Claims area, Park City, Utah, May 2002: U.S. Geological Survey Water-Resources Investigations Report 03-4296

- Kimball, B.A., Runkel, R.L., and K. Walton-Day. 2005. Principal Locations of Metal Loading from Floodplain Tailings, Lower Silver Creek, Utah, April 2004: U.S. Geological Survey Scientific Investigations Report.
- Kolm, K.E. and E. Yan. 2004. Quick Site Investigation for the Upper Silver Creek Watershed, Utah: Regional Analysis and Recommendations.
- Kolm, K.E. and E. Yan. 2005. Groundwater Flow Modeling for Prospector Square and Silver Maple Claims Tailings Sites, Park City, Utah
- Mason, J.L. 1989. Hydrology of the Prospector Square Area, Summit County, Utah, United States Geological Survey, Water Resources Investigation Report 88-4156.
- Michael Baker Jr., Inc. 2004. Silver Creek Total Maximum Daily Load for dissolved zinc and cadmium: Utah Department of Environmental Quality, Division of Water Quality, (http://www.waterquality.utah.gov/TMDL/Silver_Creek_TMDL.pdf)
- Park City Municipal Corporation. 1984. Construction Drawings for Prospector Detention Structure.
- Tetra Tech Inc. 2008. Lower Silver Creek, Utah, Reactive Transport Modeling Under High Flow Conditions for Cadmium and Zinc.
- Tetra Tech, Inc. 2008. Lower Silver Creek Data Summary Report, Park City, Utah.
- Tetra Tech, Inc. 2008. Lower Silver Creek Draft Wetland Delineation, Park City, Utah.
- Tillia, Ann M. 2001. Lower Silver Creek Innovative Assessment Work Plan, Utah Department of Environmental Quality Division of Environmental Response and Remediation.
- Tillia, Ann M. 2002. Innovative Assessment Analytical Results Report, Utah Department of Environmental Quality Division of Environmental Response and Remediation.
- U.S. Environmental Protection Agency and Upper Silver Creek Watershed Stakeholders Group. 2001. Data Interpretation Report Upper Silver Creek Watershed Surface Water/Stream Sediment Monitoring 2000
- United Park City Mines. 2005. Richardson Flat Record of Decision, (<http://www.epa.gov/region8/superfund/ut/richardsonflat/>)
- USDA. 1977. Soil Conservation Service, Soil Survey and interpretations Parleys Park Portion of Soil Survey of Summit Valley Summit County, Utah, Bulletin 495.

- **USGS. 2005. Data-collection activities by the U.S. Geological Survey (USGS) in support of groundwater flow modeling being conducted by the Bureau of Land Management (BLM) near the Prospector Square Tailings Site, Park City, Administrative Report.**
- **Utah Department of Environmental Quality/Division of Environmental Response and Remediation (UDEQ/DERR) and the United States Geological Survey (USGS).1986. Water Resources of the Park City Area, Utah with Emphasis on Groundwater; Technical Publication No. 85.**
- **Utah Department of Health (UDH).1989. Groundwater and Surface Water Study Report, Silver Creek Tailing Site.**

**APPENDIX E
MAJOR DELIVERABLES**

DOCUMENT/ACTIVITY	REFERENCE	RECEPIENTS	DUE DATE
Names, titles, qualifications of personnel to implement Removal Action Work	Settlement Agreement Paragraph 29 (a)	EPA	60 days following EPA's issuance of Action Memorandum
Designation of project coordinator responsible for Removal Action Work	Settlement Agreement Paragraph 29 (b)	EPA	15 days following EPA's issuance of Action Memorandum
Request for additional data	Settlement Agreement Paragraph 37 (a)	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	7 days after identification of need
EE/CA Progress Reports	Settlement Agreement Paragraph 39	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	Quarterly on the 15 th day of each January, April, July and October after the Effective Date of Settlement Agreement
Notice of significant field events	Settlement Agreement Paragraph 41(b)	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	30 days prior to the event
All EE/CA plans, reports or other submittals required by the Settlement Agreement	Settlement Agreement Paragraph 42	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails	As set forth in Settlement Agreement, work plans or SOWs.

		& Trails	
Draft Removal Action Work Plan	Settlement Agreement Paragraph 45 (a)	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	90 days following EPA's issuance of Action Memorandum
Health and Safety Plans	Settlement Agreement Paragraph 46	EPA UDEQ BLM FWS State NR Trustee	60 days following EPA's issuance of Action Memorandum
Notice of Sample Collection Activity	Settlement Agreement Paragraph 47	EPA	30 days prior to the event unless EPA agrees to a shorter time frame
Removal Progress Reports	Settlement Agreement Paragraph 48(a)	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	Quarterly on the 15 th day of each January, April, July and October after EPA's approval of the Removal Action Work Plan
Notice of transfer of site property	Settlement Agreement Paragraph 48 (b)	EPA UDEQ	30 days prior to transfer
Final Removal Report	Settlement Agreement Paragraph 49	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	30 days after completion of Work
All Removal Action plans, reports or other submittals required by the Settlement Agreement	Settlement Agreement Paragraph 50	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	As set forth in Settlement Agreement, work plans or SOWs.

Notification of off-site shipment of Waste Material	Settlement Agreement Paragraph 51	EPA Official in receiving state	Prior to shipment
Notice of Delay, including Force Majeure	Settlement Agreement Paragraph 91	EPA	48 hours after (verbal); 5 days after written
Certificate of Insurance	Settlement Agreement Paragraph 118	EPA	30 days prior to commencing work on-site
Financial Assurance for EE/CA	Settlement Agreement Paragraph 119 (a)	EPA	60 days after Effective Date of Settlement Agreement
Financial Assurance for Removal Action	Settlement Agreement Paragraph 119 (b)	EPA	60 days following EPA's issuance of Action Memorandum
Report summarizing data collection efforts associated with previous investigations	EE/CA SOW 2.0	EPA UDEQ BLM FWS State NR Trustee	30 days after the Effective Date of the Settlement Agreement
Sampling and Analysis Plan , which includes EE/CA Field Sampling Plan, Health & Safety Plan and QAPP	EE/CA SOW 3.1.1	EPA UDEQ BLM FWS State NR Trustee	60 days after Effective Date of Settlement Agreement
Interim Site Characterization Reports for each phase of work identified in the SAP	EE/CA SOW 3.4.1	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	Monthly during site characterization activities
Site Characterization Report including	EE/CA SOW 3.4.1	EPA UDEQ BLM	90 days from UPCM's receipt of

Streamlined Risk Assessment		FWS State NR Trustee UDPR if impact on Rails & Trails	all analytical laboratory data
EE/CA Outline	EE/CA SOW 7.0	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	Concurrent with submittal of Site Characterization Report
Draft EE/CA Report	EE/CA SOW	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	60 days after EPA approval of Site Characterization Report
Final EE/CA Report	EE/CA SOW	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	30 days after receipt of EPA comments on draft EE Report
Draft Assessment and Restoration Analysis	NRD SOW	EPA UDEQ BLM FWS State NR Trustee UDPR if impact on Rails & Trails	60 days after EPA approval of final EE/CA Report